

BEFORE THE
PUBLIC SERVICE COMMISSION OF WISCONSIN

Investigation Into SBC Wisconsin's Unbundled Network
Elements

6720-TI-161

UNE COMPLIANCE ORDER

This is a determination regarding the compliance filing cost studies required by the Commission's March 22, 2002, *Final Decision* in this proceeding.

Introduction

On March 22, 2002, the Commission issued its *Final Decision* in this proceeding in which it adopted cost study methods that are compliant with Total Element Long Run Incremental Costs ("TELRIC") pricing standards for unbundled network elements ("UNEs"). This followed a hearing that was held from February 26, to March 8, 2001 ("February 2001 hearing"). The *Final Decision* directed SBC Wisconsin ("SBC"), formerly known as Wisconsin Bell d/b/a Ameritech Wisconsin, to rerun and file its cost studies, the resulting UNE rates, and draft tariffs by May 21, 2002, in accordance with the *Final Decision*. The Commission also determined that final rates determined through application of the methodology established in that order would be effective May 21, 2002.

SBC's compliance cost studies and proposed tariffs included 50 confidential cost studies that filled six binders. On June 21, 2002, the Commission issued its *Order Regarding Compliance Filing* setting the due dates for comments and giving instructions for comments. On August 1, 2002, a group of Competitive Local Exchange Carriers ("CLECs") consisting of

DRAFT

AT&T Communications of Wisconsin, L.P., WorldCom, Inc., McLeodUSA

Telecommunications Services, Inc., and TDS Metrocom, Inc. filed joint comments on SBC's cost studies ("CLECs' August, 2002, comments"), and filed their own proposed revised cost studies and tariffs. Following the CLECs' comments, staff submitted a data request ("staff's August, 2002, data request") to SBC covering areas that were not reviewed by the CLECs. On September 10, 2002, SBC filed its response to the CLECs' comments and a separate response to staff's data request ("SBC's September, 2002, response").

Staff prepared a Decision Matrix listing the issues raised in the CLECs' August, 2002, comments and staff's August, 2002, data request and identifying decision options for the Commission. On November 13, 2002, the Decision Matrix was sent to parties for information and further comment. Comments were received on November 27, 2002.

Staff also prepared a consolidated document that combined the CLECs' August, 2002, comments on SBC's May 21, 2002, compliance filing, staff's August, 2002, data request on the same compliance filing and SBC's September, 2002, responses to CLECs' and staff's issues, including references to the cost study appendices ("Consolidated Document"). On December 10, 2002, staff transmitted the Decision Matrix and the Consolidated Document and appendices to the Commission for its consideration. A draft order was prepared and sent to parties on mm/dd/yy to assist the Commission in making its determinations in this proceeding. Comments were received on mm/dd/yy.

At the mm/dd/yy open meeting(s), the Commission considered the record, and the issues presented in the cost study filings, the Decision Matrix, the Consolidated Document and

associated appendices, staff's draft order, and the parties' comments. The Commission now issues this decision with respect to SBC's Compliance Filing.

A list of participating parties is attached hereto as Appendix A.

Findings of Fact

1. It is reasonable for the Commission to rely on SBC's May 21, 2002, cost studies as complying with the *Final Decision*, except for the issues identified and discussed in this order.

2. It is reasonable for the Commission to accept SBC's September 10, 2002, revised cost studies for Line Connection-Install; Switch Port Connection-Install; Switch Port Connection-Disconnect; Switch Port Conversion; UNE-P Migration without Dial Tone-Install; and UNE-P Migration without Dial Tone-Disconnect as reasonable implementations of the *Final Decision*, modified only for further determinations regarding travel costs.

3. It is reasonable for the Commission to accept the CLECs' August 1, 2002, cost studies for Switch Port Service Order-Install, Switch Port Service Order-Disconnect, Subsequent and Record Only Loop Service Order, Record Only Switch Port Service Order and Subsequent Switch Port Conversions rate elements as reasonable implementations of the *Final Decision*, modified only for further determinations regarding joint and common costs.

4. It is reasonable to apply the Administrative charge, the Design and Central Office ("CO") Connection charge, and the Customer Connection charge to Digital Service 1 ("DS1") and DS3 unbundled loops, and to apply a Line Connection charge based on 100 percent manual cross connects to voice grade unbundled loops. In addition a Line Connection charge with 2 percent manual cross connects shall apply to unbundled network element-platform ("UNE-P").

This is a reasonable means of implementing the *Final Decision*. Further adjustments are also necessary to remove travel costs.

5. It is reasonable for the Commission to request comments on the Administrative charge, the Design and CO Connection charge, and the Customer Connection charge applicable to DS1 and DS3 products.

6. It is reasonable for the Administrative charge, the Design and CO Connection charge, and the Customer Connection charge applicable to DS1 and DS3 products to be applicable when review of the revised cost studies is complete. It is reasonable for the rates for the two forms of Line Connection charges for voice grade products to be effective as of May 21, 2002.

7. It is reasonable to develop migration charges for UNE-P only, but not for other UNEs, at this time.

8. It is reasonable to allow SBC to charge a Manual Service Ordering charge under the limited circumstances described in this order.

9. It is reasonable to require SBC to remove the Billing Development charge from its tariffs and reinsert the explanation from the Commission's docket 6720-TI-120 decision¹ regarding the Usage Establishment charge.

10. It is reasonable to require SBC to remove travel costs from any cost study that did not include those costs when presented in the February 2001 hearing.

11. It is reasonable to require a 20 percent discount to the November 2000 contract prices for Digital Loop Carrier ("DLC") electronics.

¹ Matters Related to Satisfaction of Conditions for Offering InterLATA Service (Wisconsin Bell, Inc., d/b/a Ameritech Wisconsin), docket 6720-TI-120, issued May 30, 1997, pp. 68-69.

12. It is reasonable to require SBC to provide both the loop and the subloop at no cost even when provided in conjunction with the Broadband UNE.

13. It is reasonable to accept SBC's allocation of the costs for the DLC between voice grade service and the Broadband UNE.

14. It is reasonable to presume features, functions and capabilities are technically feasible when they are offered by manufacturers unless SBC provides persuasive evidence otherwise that capacity restraints or significantly increased costs will occur if such features, functions and capabilities are deployed.

15. It is reasonable to use the CLECs' method of weighting growth and replacement lines.

16. It is reasonable to accept that the signaling costs included in the unbundled local switching shared transport charge are different than the signaling costs in the signaling system seven ("SS7") charges.

17. It is reasonable to require SBC to remove the adjustment to TELRIC plant related expenses made in its May 21, 2002, compliance filing of its joint and common model.

18. It is reasonable to allow the addition of operations support system ("OSS") testing costs to the joint and common mark-up.

19. It is reasonable to require SBC to apply the Commission's investment growth adjustment to the full plant investment instead of to the incremental price increases in the joint and common cost model.

20. It is reasonable to require SBC to compound the maintenance productivity factor over three years and to reduce the maintenance factor using data from the amount of fully depreciated plant.

21. Appendix B shows the resulting rates from the Non-Recurring cost study methods the Commission determined to be TELRIC compliant in the *Final Decision*.

Conclusions of Law

1. The Commission has jurisdiction to issue this order under Wis. Stat. §§ 196.02(1), and (7), 196.03, 196.04, 196.06, 196.196, 196.20, 196.204(3), 196.219, 196.28, 196.37(2), 196.40 and other provisions of Wis. Stat. Ch. 196 and 227, as may be pertinent hereto and 47 U.S.C. §§ 251, 252, 253(b), 261(b)(c) and other provisions of 47 U.S.C. § 251 *et. seq.* as may be pertinent hereto.

2. Unbundling the features, functions and capabilities of the Next Generation Digital Loop Carrier (“NGDLC”) architecture that supports both voice and xDSL services is required by the public interest and consistent with the factors in Wis. Stat. § 196.03(6).

3. CLECs are impaired within the meaning of 47 U.S.C. § 251(d) and 47 C.F.R. § 51.317 without all the features, functions and capabilities of the NGDLC architecture that supports both voice and xDSL services.

4. CLECs are impaired unless SBC offers a modified end-to-end Broadband UNE when new line cards become available.

5. CLECs are impaired unless SBC makes available to all telecommunications carriers all the technically feasible services, features, and functions of the NGDLC

architecture that supports both voice and xDSL services when provided by manufacturers.

This requirement applies to both existing and future features, functions, and capabilities.

6. The Commission will apply the determination on line splitters from its *Order Rejecting an Interconnection Agreement* in PSCW docket 05-MA-120 (March 15, 2002), as provided by the *Final Decision* in this proceeding and the Settlement Stipulation in docket 6720-TI-160 which requires that SBC provide line splitters for line splitting or line sharing to any requesting telecommunications provider.

7. CLECs are impaired unless SBC provides the line splitting functionality of the NGDLC architecture to any requesting telecommunications provider.

8. The cost study methods adopted by the Commission are TELRIC compliant and cost study methods that conflict with those adopted by the Commission herein are presumed not to be TELRIC compliant.

Opinion

The determinations in this order are grouped into the following sections: Nonrecurring Charges; Unbundled Loops; Project Pronto/Broadband UNE; Unbundled Local Switching; and Other Issues. The discussion in this order references and covers the issues that were raised in CLECs' August, 2002, comments, and staff's August, 2002, data request. Unless otherwise indicated, this order refers to the CLEC's August, 2002, comments, staff's August, 2002, data request and SBC's September, 2002, response. The *Final Decision* in many cases adopted certain adjustments conceptually, but did not specify the necessary adjustments to specific cost studies. This order specifies how cost studies should be modified to comply with the Commission's *Final*

Decision. The Commission finds herein that, unless the CLECs or staff have raised an issue, SBC's May 21, 2002, compliance filing is in compliance with its *Final Decision*.

Non-Recurring Charges

Non-recurring charges reflect one-time costs for activities required to initiate or provide telecommunications services and UNEs. Such activities are generally accomplished through SBC's OSS. This section of the decision addresses 17 of the CLECs' non-recurring charges issues in two groups. The first group covers the assumptions for the proportions of Dedicated Inside Plant and Dedicated Outside Plant ("DIP/DOP") in various cost models. The next group covers the assumptions regarding the amount of fall-out to manual processing in electronic ordering systems in various cost models. In deciding these issues as groups, the Commission accepts SBC's revised September, 2002, cost studies to resolve the DIP/DOP issues, and the Commission accepts the CLECs' August, 2002, cost studies to resolve the fall-out issues.

Dedicated Inside Plant and Dedicated Outside Plant (DIP/DOP)

The CLECs asserted that SBC did not comply with the Commission's determination to apply an assumption of 95 percent DIP/DOP, where DIP/DOP are applicable. As explained in the *Final Decision*, DIP/DOP facilities allow for rapid activation and deactivation of services with no physical disruption of service as physical connections remain in place and only a command from the OSS is necessary to activate and deactivate service.² The specific rate elements in dispute include Line Connection-Install (issue 1); Switch Port Connection-Install (issue 3); Switch Port Connection-Disconnect (issue 6); Switch Port Conversion (issue 7);

² *Final Decision* at p. 178.

UNE-P Migration without Dial Tone-Install (issue 8); and UNE-P Migration without Dial Tone-Disconnect (issue 11).

The CLECs asserted that the 95 percent DIP/DOP should apply to all the Network Element Control Center (“NECC”) costs for the Line Connection-Install charge, and additionally, to all the costs associated with the Circuit Provisioning Center (“CPC Design”), Field Operations Group (“FOG”), Field Dispatch Group (“FDG”) and the NECC for Switch Port Connection-Install, Switch Port Connection-Disconnect and Switch Port Conversion charges. Similar adjustments were also proposed for UNE-P Migration without Dial Tone-Install, and UNE-P Migration without Dial Tone-Disconnect. The CLECs asserted that all of these groups are involved with field work and thus should have the 95 percent DIP/DOP apply.

SBC agreed that the CPC Design, FOG, and FDG groups should have the 95 percent DIP/DOP applied. However, SBC disputed the treatment of the NECC activities. SBC filed revised costs studies on September 10, 2002, to reflect its revised proposal. For certain of the rate elements, SBC asserted that the 95 percent DIP/DOP should not apply to the activities of “Screen Work Order (WORD) Document,” “Screen Facilities Information” and “Complete WORD Document.” SBC asserted that these activities would occur regardless of whether a line has DIP/DOP, asserting that screening and a work order are always necessary. For UNE-P Migration without Dial Tone-Install and Disconnect, SBC asserted that the only additional activities that should have 95 percent DIP and DOP applied are “Monitor inside technician” and “Monitor and release transactions.”

The Commission determines that SBC’s September 10, 2002, revised cost studies for Line Connection-Install; Switch Port Connection-Install; Switch Port Connection-Disconnect

Switch Port Conversion, UNE-P Migration without Dial Tone-Install, and UNE-P Migration without Dial Tone-Disconnect reasonably implement its *Final Decision*. SBC made significant adjustments related to DIP/ DOP in these cost studies in response to the CLECs' issues. SBC identified a limited number of activities, where it did not believe the 95 percent DIP/ DOP should apply. The Commission agrees these activities can reasonably be expected to occur regardless of whether DIP/DOP exists.

As a related issue, the CLECs asserted that SBC double counted the clerk costs in the NECC (issues 2, 5 and 9). SBC asserted that the NECC clerk time is not double counted when SBC's corrections for DIP/ DOP are made. The CLECs' revisions to the cost studies created the double counting. Because the Commission accepts SBC's DIP/ DOP corrections, it also accepts SBC's treatment of the NECC clerk time.

SBC also corrected a formula error identified by the CLECs (issue 5), and SBC treated the FDC for UNE-P Migration without Dial Tone charges (issue 10) slightly differently than how the CLECs proposed. The treatment of FDC costs had very little impact on the final rate. In light of the difficulty associated with mixing and matching cost studies, the Commission accepts SBC's treatment of FDC costs for UNE-P Migration without Dial Tone charges. In summary, the Commission determines that SBC's September 10, 2002, revised cost studies for Line Connection-Install; Switch Port Connection-Install; Switch Port Connection-Disconnect Switch Port Conversion, UNE-P Migration without Dial Tone-Install, and UNE-P Migration without Dial Tone-Disconnect are reasonable implementations of its *Final Decision* in this proceeding.

Fall-Out

The CLECs asserted that SBC did not comply with the Commission's two percent fall-out rate for orders both in combination and not in combination. As explained in the *Final Decision*, fall-out is the percentage of service orders that require manual intervention in an otherwise electronic processing system. When an order does not fall-out, but instead is able to flow-through, then no manual intervention is necessary. Manual intervention is costly.³ The specific rate elements in dispute include Switch Port Service Order-Install (issue 12), Switch Port Service Order-Disconnect (issue 14), Subsequent and Record only Loop Service Order (issue 15), Record Only Switch Port Service Order (issue 16) and Subsequent Switch Port Conversions (issue 17). Additionally, as the Commission required only one service order to be applicable to UNE-P, the CLECs wanted clarification as to which service order should apply, the loop or the port service order (issue 13). SBC entirely disagreed with the CLECs' proposed adjustments to the cost studies for these charges.

The CLECs contended that it is quite clear that the Commission intended SBC to use the two percent fall-out rate for both loops (which SBC has done) and switch ports (which SBC has not done). According to the CLECs, this is demonstrated in the language of the *Final Decision* that the two percent fall-out percentage applies both in combination (including a switch port) and not in combination (stand alone DS0 elements). SBC asserted that the *Final Decision* only required changes to the Loop Service Order fall-out and did not require changes to the Switch Port Service Order fall-out. The Commission agrees with the CLECs and determines that SBC's interpretation would make meaningless the Commission directions relating to the application of

³ *Final Decision* at p. 169.

the two percent fall-out rate to loops both in combination and not in combination.

The CLECs pointed out that SBC only applied the two percent fall-out rate to Initial Orders but not Subsequent and Record Only orders. The CLECs asserted that the Commission's reference to the "initial receipt" of an order was not intended to preclude the application of this fall-out rate to Subsequent and Record Only orders. The CLECs say this is demonstrated in the Commission's discussion of the "Stages of Processing."

The CLECs proposed to use a 2 percent end-to-end fall-out rate. [SBC] proposes different fall-out rates at various stages of the ordering and provisioning processes. For example, [SBC] uses different fall-out rates for the initial receipt of an order and for the provisioning of an order. The Commission finds that [SBC's] method of using different fall-out rates for different stage of ordering and provisioning processes is reasonable in determining forward-looking NRCs.⁴

The CLECs argued that Commission's use of the word "initial" was limited in its application to the service order process as opposed to end-to-end provisioning of an unbundled element. SBC asserted that because the *Final Decision* does not address activity that occurs after the initial receipt of an order, the Subsequent Order and Record Work Order costs were not required to be adjusted.

The Commission agrees with the CLECs that its use of the word "initial" was not intended to preclude the application of this fall-out rate to Subsequent and Record Only orders. The *Final Decision* used the word "initial" in connection with the stages of processing as described by the CLECs. The Subsequent and Record Only form of charges were designed to reflect that less work is needed for this type of order than for an "Initial" order. As a result the Subsequent and Record Only charges were designed to be lower charges than the "Initial" order charge. SBC's interpretation would result in Subsequent and Record Only order charges that are

⁴ *Final Decision* at p. 170.

higher than Initial order charges. Because such a result is contrary to the purpose of these different charges, the Commission rejects SBC's interpretation as unreasonable. The Commission accepts the CLECs' cost studies for service orders and their interpretation of the word "initial."

The CLECs also pointed out that SBC, in applying a single service order charge for UNE-P, chose the higher Switch Port Service Order instead of the lower Loop Service Order charge. As a result of the Commission's accepting the CLECs' proposed adjustment regarding fall-out rates, the difference between these two charges now should be minimal. Accordingly, the basis for this dispute has been eliminated. However, the Commission will clarify that it intends the Loop Service Order, not the Switch Port Service Order, to apply.

In summary, the Commission agrees with all the CLECs' adjustments to the following rate elements: Switch Port Service Order-Install, Switch Port Service Order-Disconnect, Subsequent and Record Only Loop Service Order, Record Only Switch Port Service Order and Subsequent Switch Port Conversions. The Commission determines that the CLECs' August 1, 2002, cost studies for these rate elements are a reasonable implementation of its *Final Decision* in this proceeding. The only further adjustment that is necessary is to implement the decisions on joint and common costs as discussed below.

Administrative charge, Central Office ("CO") Connection charge, and Customer Connection charge for unbundled loops, or Loop Provisioning and Line Connection

The CLECs' comments and SBC's reply connected two issues that were presented as unrelated decisions in the Commission's *Final Decision*. One of those decisions was to require 100 percent manual cross connects for stand-alone unbundled loops. The other decision was to

not allow SBC to charge the Administrative charge, Central Office Connection charge, and Customer Connection charge for unbundled loops. In this order the Commission now addresses these two decisions as related issues.

In SBC's initial May 21, 2002, compliance filing, SBC included new cost studies for Loop Provisioning charges for DS0, DS1, and DS3 to implement the Commission's decision to use 100 percent manual cross connects for stand alone unbundled loops. The CLECs objected to SBC's filing new cost studies in the compliance filing. The CLECs asserted that SBC interpreted the requirement to eliminate three cost elements as a justification for introducing entirely new cost studies for Loop Provisioning, thereby linking these formerly unrelated issues.

In staff's August, 2002, data request, staff explained that it expected to see two versions of Line Connection charge cost studies; one that reflected the 2 percent manual CO cross connects and another that reflected 100 percent manual CO cross connects, as the staff understood that the Commission broke this charge into two charges with one applicable to stand alone unbundled loops and another applicable to loops in combination. The 100 percent manual CO cross connects cost study would then be applicable to the Line Connection charges for stand alone unbundled loops. The 2 percent manual CO cross connects cost study would be applicable to loops in combination. As SBC had already filed a revised Line Connection cost study incorporating the 2 percent manual CO cross connects, staff asked SBC to provide a revised line connection cost study with 100 percent manual CO cross connects.

In SBC's September, 2002, response to staff's August, 2002, data request and the CLECs' August, 2002, comments, SBC did not file a revised Line Connection cost study, but instead filed revised Administrative charge, CO Connection charge and Customer Connection

charge cost studies for each of DS0, DS1, and DS3 unbundled loops and withdrew its initial DS0, DS1 and DS3 Loop Provisioning cost studies.

In further relation to the Administrative charge, CO Connection charge, and Customer Connection charge, SBC, in its May 21, 2002 compliance filing, additionally eliminated those non-recurring charges (“NRCs”) for interoffice transport and added transport provisioning cost studies. In its September, 2002, response, SBC withdrew the transport provisioning cost studies and filed revised Administrative charge, CO Connection charge, and Customer Connection charge for interoffice transport. These kinds of NRCs have previously existed for interoffice transport.

SBC made the following argument in its September, 2002 response:

In the first paragraph on page 184 of the *Final Decision*, the Commission states:

“[SBC] proposed three new NRCs called an administrative charge, a design and CO connection charge, and a customer connection charge, in addition to its former initial service order charge and line connection charge. The CLECs argued that all the NRCs should be covered by a single charge and it is not clear if the CLECs realize new charges were being proposed. The Commission determined that [SBC] should not be allowed to add additional NRCs until it makes a clear showing that the changes are indeed appropriate and how these charges would be applied.”

In the following paragraph the Commission rejects the three purportedly “additional” charges in the case of “DSO services.” The Commission misunderstood the nature and purpose of the three NRCs; these were *not* in addition to any service order or line connection charge. Instead, they were the *only* NRCs that would apply in the case of a digital loop. By pointing out this misunderstanding, [SBC] believes that it has made the requisite “clear showing that the charges are indeed appropriate.” Moreover, because the Commission rejected the three NRCs only for DSO services (see the second paragraph on page 184 of the *Final Decision*), and expressly approved the classification of DS1s and DS3s as “complex” (see pages 172-173 of the *Final Decision*), [SBC] believes it is reasonable in any event to read the *Final Decision* as approving the three NRCs in question in the case of DS1 and DS3 loops. Accordingly, Ameritech believes it

is appropriate and fully consistent with the *Final Decision* to re-file its original studies and price proposals (subject only to revisions required by other determinations in the *Final Decision*). [SBC] is therefore withdrawing the new provisioning charge for digital loops and re-filing such original studies and price proposals. SBC September 2002 Reply Comments, Consolidated Document at pp. 27-28

SBC therefore explained that the proposed charges were to apply instead of the Service Order charge and Line connection charge. Accordingly, the Commission in this review amends the *Final Decision* to now find that the Administrative, Design and CO Connection, and Customer Connection charges were in addition to SBC's former initial service order charge and line connection charge.

The Commission determines that it is reasonable to apply the Administrative charge, a Design and CO Connection charge, and a Customer Connection charge to DS1 and DS3 unbundled loops instead of the Service Order charge and the Line Connection charge. The Commission determines that it is reasonable to apply the Line Connection charge to DS0 (voice grade) unbundled loops. In addition, a Line Connection charge with 2 percent manual cross connects should apply to UNE-P and 100 percent manual cross connects to stand alone unbundled loops. This is a reasonable means of implementing the Commission's decision to classify DS0 as a simple product and DS1 and DS3 as complex products. It also applies less manual processing for UNE-P loops than for stand alone unbundled loops as staff indicated it expected to see to comply with the *Final Decision* as described above. In the *Final Decision*, the Commission explained that it believed that the Administrative charge, a Design and CO Connection charge, and a Customer Connection charge were *per se* unreasonable in relation to the retail rates for voice grade service. Applying these charges to only DS1 and DS3 alleviates the concern that the charges were *per se* unreasonable.

The CLECs have not had an opportunity to comment on the revised cost studies for the proposed Administrative, Design and CO Connection and the Customer Connection charges submitted by SBC in its September, 2002, response. It is therefore reasonable for the Commission to request comments from the CLECs on these charges. The Commission considers comments sufficient to address revisions which are limited to the above charges for DS1 and DS3 products.

Because this order modifies the *Final Decision*, it would not be reasonable for the new rates for the above charges to be applicable as of May 21, 2002, the implementation date for determinations made in the *Final Decision*. The Administrative, Design and CO Connection, and the Customer Connection charges should, instead, be applicable when review of the revised cost studies is complete. Nevertheless, it is reasonable for the rates for the two forms of line connection charges to be applicable as of May 21, 2002, as this implements determinations made in the *Final Decision*.

Migrations versus New Installations

Staff inquired why SBC did not create a Migration charge everywhere that SBC has an Install charge and a Disconnect charge. Staff explained that the language in the *Final Decision* appeared to be applicable to all rate elements and the *Final Decision* provided that migrations should not include design costs.

SBC responded that a “migration” is only applicable to an end-to-end service and that a stand-alone UNE requires physical work, most frequently in the central office, and thus cannot be migrated. The Commission does not agree with SBC’s assertion. A migration of a

stand-alone unbundled UNE is possible. Service is in place, so facilities do not need to be designed to serve an existing customer.

Implementation of staff's proposal, however, would affect almost all of the NRC rate elements. Identification of the work groups and rate elements potentially affected could lead to significant delays in determining final rates.

If this issue was of major concern to CLECs, they would logically have raised it in their own comments. The CLECs did not raise this issue however, staff did. Accordingly, in light of the difficulty in implementing staff's proposal, the Commission determines that it is reasonable to accept the existence of only a UNE-P migration charge and to not develop migration charges for other UNEs at this time.

UNE-P Manual Service Ordering

Staff raised an issue whether SBC should be allowed to impose a UNE-P Manual Service Order charge. The Commission determines herein that SBC may charge a UNE-P Manual Service Order charge, but only in limited circumstances.

Staff, when initially reviewing SBC's May 21, 2002, compliance filing, believed the UNE-P Manual Service Ordering cost study was a new cost study because SBC's June 2000, cost studies did not include a UNE-P Manual Service Ordering cost study. However, in SBC's September, 2002, response to staff's August, 2002, data request, SBC explained that during the February, 2001, hearing, SBC had submitted a UNE-P Manual Service Ordering cost study. This was in response to the flow-through rates the CLECs' proposed for service ordering. By including the UNE-P Manual Service Order charge in its compliance filing, SBC assumed that

the Commission allowed the UNE-P Manual Service Order charge in its *Final Decision* when it accepted the CLECs' two percent fall-out rate.

The Commission determines herein that it is reasonable to allow a UNE-P Manual Service Order charge under the following limited circumstances. When SBC has developed and offered an electronic process, but a CLEC has chosen to use a manual process instead of the electronic process, then it is reasonable to charge a higher UNE-P Manual Service Order charge. The Commission's assumption of a 2 percent fall-out to manual processing requires the use of an efficient electronic processing system to achieve this low cost in keeping with the forward-looking TELRIC pricing standard discussed in the *Final Decision*. SBC cannot be expected to achieve these low costs if CLECs chose not to use the electronic processing systems SBC provides. However, when SBC's electronic systems are simply not fully available for any reason, then it would not be reasonable for the CLECs to pay a higher charge. It is not reasonable for CLECs to incur higher charges because SBC's systems are not available or functioning properly.

In addition, as discussed in the *Final Decision*, the CLECs do not have a choice of another provider from which they can purchase unbundled loops that were put in service under decades of monopoly regulation.⁵ SBC allows unbundled access because the Telecommunications Act of 1996 requires this. Accordingly, the CLECs are dependent on the quality of SBC's documentation and assistance to implement and operate electronic processing systems with SBC. If the documentation provided is incomplete or inaccurate, this process can become difficult and time consuming. In normal business to business relationships, it is in

⁵ *Final Decision* at p. 167.

interest of both the selling and buying companies to accomplish this process as efficiently as possible.

To ensure that SBC be reasonably compensated for its work while not allowing it to unfairly increase competitors' costs by creating inefficient ordering systems, the Commission determines that it is reasonable to place an additional limitation on when SBC may charge a UNE-P Manual Service Ordering charge. Once a CLEC has made sufficient implementation steps to be able to send a test electronic order, it should no longer be charged Manual Service Ordering charges. Choosing such a point in time to end the UNE-P Manual Service Order charges will help provide equal incentives for both parties to efficiently implement electronic systems.

As the UNE-P Manual Service Order charge cost study was presented during the February, 2001, hearing in this proceeding, the CLECs have had an opportunity at hearing to challenge the study. The Commission, therefore, requests the CLECs to provide comments on the UNE-P Manual Service Order charge to finalize this rate element. In light of the fact that the Commission has clarified its *Final Decision*, it would not be reasonable for the UNE-P Manual Service Order charge to be applicable as of May 21, 2002. Instead, the UNE-P Manual Service Order charge will be applicable when the Commission has completed its review and determined that the revised cost studies comply with its *Final Decision*.

Billing Development Charge

Staff raised an issue in its August, 2002, data request as to whether SBC should be allowed to charge a Billing Development Charge. In light of its prior decisions, as explained below, the Commission determines that SBC is not allowed to implement this charge.

Staff, in its August, 2002, data request, stated that SBC deleted the following language from its current tariffs when it filed its May 21, 2002, compliance tariffs:

Pursuant to the direction of the Public Service Commission of Wisconsin in its Finding of Fact, Conclusion of Law and Second Order in docket 6720-TI-120, [SBC] will not recover the ULS Usage establishment costs as a separate charge and has reserved the right to revise the unbundled local switching rate to recover costs associated with usage development and implementation.

Following this deletion in its May 21, 2002, compliance tariffs, SBC inserted a new non-recurring charge in its compliance tariffs which it called a “Billing Development” charge. Staff inquired whether the Billing Development charge covered the same costs as the former prohibited Unbundled Local Switching (“ULS”) Usage Establishment charge. SBC replied that, except for immaterial differences, the Billing Development charge did recover essentially the same costs as the former ULS Usage Establishment charge. However, SBC further explained in its September, 2002, response that it had submitted the cost study for a new Billing Development charge at the February, 2001, hearing which was not questioned.

The Commission determines herein that SBC shall not be allowed to charge its Billing Development charge. This is consistent with this Commission’s determination in docket 6720-TI-120, the evaluation of SBC’s Statement of Generally Available Terms and Conditions (SGAT).⁶ During the February, 2001, hearing, SBC submitted a cost study for a charge that was already prohibited. SBC did not request or even identify that it was proposing a charge that had previously been prohibited.

In addition, in its September, 2002, response, SBC requested that, if the Commission should disallow the Billing Development charge, SBC should be allowed to revise its ULS

⁶ Matters Relating to Satisfaction of Conditions for Offering InterLATA Service (Wisconsin Bell, Inc., d/b/a Ameritech Wisconsin) docket 6720-TI-120, issued May 30, 1997, pp. 68-69.

recurring charge to include these billing development costs. The treatment of any possible modification of ULS charges is also covered in the above paragraph that SBC removed from its tariff. Simply reinserting that language will resolve the issue of further modification to the ULS charges. The Commission determines that it is reasonable to require that SBC remove the Billing Development charge from its tariffs and add back the deleted the language that explained the Commission's decision in docket 6720-TI-120 regarding the ULS Usage Establishment charge.

Travel to Unmanned Central Offices added to NRCs

Both the CLECs and staff raised an issue regarding the addition of travel costs to cost studies. The Commission herein determines that it will not allow SBC to add travel costs to any cost study that did not originally include travel costs.

The Commission in the *Final Decision* determined that it would accept SBC's proposed travel costs for travel to unmanned central offices based on SBC's proposed percentage of unmanned central offices.⁷ The CLECs' August, 2002, comments noted that SBC added travel costs to the charges for connection and disconnection of line splitters where previously SBC had not proposed travel costs. In addition, staff noted, in its August, 2002, data request, that SBC had added travel costs to the NRCs for Line Connection charge, the DS0, and DS1 Digital Loop, DS3 Digital Loop, Subloop, Dark Fiber, Unbundled Local Transport and UNE-P Migration, which previously did not include travel costs. SBC's September, 2002, response explained that it added the cost for travel to unmanned central offices to any cost study which included the FOG.

⁷ *Final Decision* at p. 181.

The Commission determines that it is not reasonable for SBC to add travel costs to any cost study submitted in the February 2001, hearing that did not originally include travel costs. Where travel costs were not proposed, there is no record covering whether travel is likely to be necessary, or the frequency with which such travel might occur for those particular types of activities. No opportunity for cross examination was provided to the CLECs. The Commission, therefore, determines that it had accepted SBC's proposed travel costs as filed in the February, 2001, hearing and requires any additional travel costs to be removed.

Unbundled Loops

DLC Electronics Discount

The CLECs asserted in their August, 2002, comments that SBC did not make the Commission's required adjustment to reflect the discounts SBC has achieved on its contract for electronics. The Commission determines herein that SBC should apply a 16.02 percent discount for the reasons explained below.

The CLECs in their August 2002, comments explained that SBC and the CLECs were in agreement that SBC did update its materials prices in its May 21, 2002, compliance filing to reflect the November, 2000, contract for electronics. However, the CLECs disagreed with SBC's May 21, 2002, compliance filing as to whether further discounts should be applied to the November, 2000, contract prices. The CLECs, in the February 2001, hearing, proposed a 16.02 percent discount which encompassed a standard term discount and a volume discount. The Commission in its *Final Decision* accepted that a standard term discount would apply, but

determined that the volume discount should be based on the actual level of discount SBC achieves.⁸

The CLECs identified in their August, 2002, comments that they had discovery disputes during the compliance discovery process with SBC regarding obtaining the data for the actual level of discounts achieved. The CLECs provided documentation of the questions they asked during the compliance discovery process and the material they received in response to their questions. SBC in its replies provided in the compliance discovery process limited the time period during which the actual discounts had occurred. SBC, in its September, 2002, response, asserted that it did not receive any discounts off the base prices of the November 2000 price list during the year 2000.

The Commission in its *Final Decision*, however, did not limit the time period for the receipt of discounts. The Commission in its *Final Decision* required SBC to use the actual level of discounts it had achieved. The language in the *Final Decision* concerning the achieved level of discounts would be meaningless if the time period for the discounts was limited to only one month after the initial date of the contract. The Commission intended that any discounts achieved by the time of the *Final Decision* should be included.

The CLECs proposed in their August, 2002, comments that the Commission should extrapolate and use a 20 percent discount. The CLECs believed that if the actual level of discounts achieved was less than their 16.02 percent proposed in the February, 2001, hearing, then SBC would have provided this data in the compliance discovery process. Accordingly, the CLECs concluded that the discount must be greater than 16.02 percent and proposed a 20 percent discount.

⁸ *Final Decision* at p. 145.

The Commission determines herein that it is unreasonable to assume no discounts simply because none were realized in the first month of the contract. The Commission, accordingly, determines that it is reasonable to require SBC to use the CLECs' most recently proposed 20 percent discount, unless and until SBC provides data demonstrating it had actually achieved a lower discount as of the date of the *Final Decision*.

Project Pronto-Broadband UNE

Allocation of costs to the HFPL

The CLECs asserted, in their August, 2002, comments, that SBC attempts to assess the full subloop rate (\$7.23 per month) when carriers use only the high frequency portion of loop ("HFPL") for the subloop (or "HFPSL"). SBC, in its September, 2002, response, asserted that the Commission's decision regarding the high frequency spectrum only applies to the full loop and not the subloop. The Commission determines herein that both the loop and the subloop should be provided at no cost, per the *Final Decision* as explained below.

The CLECs asserted the Commission's decision required the HFPL, including the subloop, to be provided at no cost. The CLECs' cited the following discussion in the Commission's *Final Decision*.

After weighing the evidence about the impact of giving away the HFPL will have on competition from other facilities-based broadband providers and their incentives to invest in Wisconsin, the windfall in profits from the 50 percent rate, and the incentive for data CLECs to compete with [SBC] in Wisconsin, the Commission finds that it is reasonable for [SBC] to provide the HFPL UNE at no cost. [*Final Decision* at p. 120]

SBC responded with the following argument:

The product covered by the Commission's *Final Decision* at p. 120 is the HFPL UNE. This is a completely different product from the Project Pronto HFPSL. The HFPL UNE is the high frequency portion of a stand alone home run copper loop. It is itself a UNE (or at least pre-USTA was a UNE), and can be accessed at

the central office. The HFPSL, on the other hand, is a service that is but an integral part of what the Commission has labeled a UNE, i.e. the Project Pronto “Broadband UNE,” but it is not itself a UNE. Accordingly, it would be inappropriate to read the Commission’s order at p. 120 as applying to the Project Pronto HFPSL, particularly when it is “provided” as an integral and inseparable part of the Project Pronto “Broadband UNE.” (SBC’s September, 2003, response)

The Commission finds herein that its concerns about the windfall in profits from SBC’s proposed 50 percent rate, and its effect on the incentive for data CLECs to compete with SBC in Wisconsin as explained in the *Final Decision* apply equally to both the subloop and the loop. Further, the Commission’s *Final Decision* on the HFPL does not distinguish between the provision of HFPL on a loop versus a subloop. Clearly the language in the *Final Decision* intends that both should be provided at no cost. Accordingly, the Commission determines herein that the HFPL including both the loop and the subloop HFPSL should be provided at no cost in the manner proposed by the CLECs in their August, 2002, comments.

Division of DLC Costs

The CLECs asserted in their August, 2002, comments, that SBC’s May 21, 2002, compliance tariff would require a data carrier to pay for the entirety of SBC’s remote terminal cost even though the SBC’s voice service would rely upon the same equipment. In SBC’s September, 2002, response, it asserted that in its May 21, 2002, compliance filing it had attributed common remote terminal costs, with a portion of these investments allocated to both the voice grade services and the Broadband UNE. SBC in its September, 2002, response provided the Commission with references as to where in its cost study the allocations were made. The Commission agrees that SBC divided the costs of DLC between both the voice grade service and the Broadband UNE so no further adjustment is necessary.

Range of Project Pronto Transmission Options

Project Pronto is the name SBC uses to describe its major capital investment in the infrastructure, deploying the new NGDLC. DLC technology allows a telecommunications carrier to provide broadband services over copper loops by utilizing the HFPL. Traditional forms of DLC access the HFPL through a line splitter and concentrate those signals using a Digital Subscriber Line Access Multiplier (“DSLAM”). The NGDLC technology provides DSLAM functionality through locating one piece of electronics in a Remote Terminal as a component of the loop structure and a corresponding piece of electronics in a Central Office which houses switching equipment. In the *Final Decision*, the Commission required SBC to provide a Broadband End-to-End UNE, but did not require access to the line cards in Remote Terminals.

The CLECs asserted that SBC’s proposed Broadband UNE tariffs unreasonably limited the transmission options that are made available. The CLECs proposed that the Commission should require SBC to offer any transmission option which the Project Pronto network is capable of providing. The CLECs, in their August, 2002, comments, proposed tariffs which provide additional transmission options. SBC responded that its proposed Broadband End-to-End UNE tariff provides all the transmission options required by the FCC’s *Project Pronto Waiver Order*. SBC asserted that it complied with the *Final Decision* by converting its Broadband Service Offering into an End-to-End UNE.

The Commission determines herein the *Final Decision* required SBC to offer, as an end-to-end UNE, all transmission options consistent with the FCC’s *Project Pronto Waiver Order* and that this determination was authorized by Wisconsin law. This decision also further

analyzes the transmission options that are consistent with the *Project Pronto Waiver Order* and further specifies the Commission's requirements for transmission options.

The Commission is authorized per Wis. Stat § 196.219(3)(f) to require additional unbundling of intrastate telecommunications services based on a determination that additional unbundling is required in the public interest and is consistent with the factors under Wis. Stat. § 196.03(6). The following are the factors in Wis. Stat. § 196.03(6).

- (a) Promotion and preservation of competition consistent with ch. 133 and § 196.219.
- (b) Promotion of consumer choice.
- (c) Impact on the quality of life for the public, including privacy considerations.
- (d) Promotion of universal service.
- (e) Promotion of economic development, including telecommunications infrastructure deployment.
- (f) Promotion of efficiency and productivity
- (g) Promotion of telecommunications services in geographical areas with diverse income and racial populations.

The Wisconsin statutory standard for unbundling is similar to the federal statutory standard. The federal statutory standard, found in 47 U.S.C. § 251(d)(2), provides that “the failure to provide access to such network element would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.” While many of the witnesses at the hearing in this proceeding discussed the federal impair standard, staff witness Mr. Duane Wilson also identified the state factors to be considered in an unbundling analysis. He explained that parties addressed the promotion of competition, the promotion of efficiency and productivity, and to a lesser extent infrastructure deployment and consumer choice in their testimony. He further explained that there had been little discussion about the impact upon the promotion of universal service, quality of life issues, or service to

rural areas and inner cities.⁹ The Commission's discussion in the *Final Decision* covered the state standards. This order further explains the Commission's analysis of unbundling under those standards. Accordingly, the Commission's discussion in this decision is organized around those state standards to further explain its analysis.

First, under the federal standard found in 47 C.F.R. § 51.317(b)(1), when analyzing impairment, the Commission must evaluate whether "lack of access to that element materially diminishes a requesting carrier's ability to provide the services it seeks to offer." In making this determination, consideration must be given to whether alternatives in the market are available as a practical, economic, and operational matter and may also rely upon factors such as cost, timeliness, quality, ubiquity, and impact on operations.

This same analysis is also applicable under the Wisconsin standard when evaluating whether additional unbundling is consistent with the promotion and preservation of competition and the promotion of customer choice. Unless there are practical ways for competitors to enter a market and reasonably expect to achieve cost efficiencies similar to the ILEC, the extent of competition will be limited. Competitors may only target high-usage customers, but would not compete ubiquitously if the ILEC obtains a competitive advantage derived from decades of monopoly regulation. Accordingly, the Commission evaluated whether alternatives are available in the marketplace as a practical, economic and operational matter as follows:

If [SBC] were still providing all of its voice services over the pre-existing network, there may have been merit to this argument [that access to the preexisting network is sufficient]. However, the additional means provided by Project Pronto architecture of providing competitive advanced services is also used to provide traditional voice services, giving [SBC] a degree of efficiency that CLECs cannot hope to achieve on the preexisting network. *Final Decision* at p. 104

⁹ Transcript p. 4414.

In the *Final Decision* the Commission analyzed the alternatives SBC said were available to competitors. In doing this analysis, the Commission considered the technological advance provided by Project Pronto as well.

Finally, [SBC] argued that even assuming the CLECs' assumptions come true regarding withdrawal of Broadband Service, copper retirement, and cross-talk problems, the Commission still could not lawfully require [SBC] to unbundle the Project Pronto DSL architecture now, because the Commission's determination must be "[b]ased on the actual state of competition."¹⁰ The Commission's concerns reflect the state of technological change in [SBC's] provision of service to its own voice customers. There are no other providers that could be similarly situated as [SBC] and be able to offer comparable services at comparable prices. (*Final Decision* at p. 106)

...

The technological advance reflected in [SBC's] Project Pronto architecture is that it has implemented electronics that provide DSLAM functionality through the use of Next Generation DLC (NGDLC). Using NGDLC technology, one piece of electronics is put in the [Remote Terminal] and another corresponding piece is put into the [Central Office]. In combination these provide DSLAM functionality.

An added feature of the NGDLC is that for incoming copper facilities, it separates the data carrying the HFPL from the low frequency voice portion of the loop and directs both the data and voice transmissions over separate fibers back to the [Central Office]. So [SBC's] NGDLC serves both voice and data traffic, making it an efficient device to use remotely in the loop structure. (*Final Decision* at p. 93)

In the federal evaluation, the FCC rules provide that additional factors that may be considered include whether the unbundling of network elements will promote the introduction of competition; facilities-based competition, investment, and innovation; reduced regulation; certainty that the element will be made available; and whether unbundling of the element is administratively practical. This same analysis is also applicable to evaluating whether additional

¹⁰ *UNE Remand Order* at par. 23.

unbundling is consistent with the promotion of economic development, including telecommunications infrastructure deployment and the promotion of efficiency and productivity.

The *Final Decision* included the following further analysis.

The Commission considers these additional factors. In light of a concern for rapid introduction of competition, and promotion of investment, the Commission chose not to require subloop unbundling of the Broadband end-to-end UNE. However, the Commission considers that it will not promote facilities-based competition, investment and innovation unless it requires unbundling of the Broadband end-to-end UNE. If practical, economical and operational alternatives to compete are not available, companies will not invest. The efficiencies [SBC] obtains through the Project Pronto architecture including the leveraging the scale of operations through its existing voice customers would inhibit other competitors from making alternative investments. The Commission, in choosing to unbundle the Broadband end-to-end UNE has chosen the path of least necessary regulation to promote competition. Finally, choosing to unbundle the Broadband end-to-end UNE is operationally practical and doing so will promote certainty in the industry of alternative means of providing DSL service. (*Final Decision* at pp. 109-110)

There was little discussion on the record regarding the other state factors including the promotion of universal service, quality of life issues, or service to rural areas and inner cities. However, no evidence was presented that these factors would be adversely affected to a degree that would be separately identifiable from the general tension of competition with quality of life and universal service issues. Access to the NGDLC functionality would also increase the level of broadband competition in rural areas by the inherent abilities of the technology.

Accordingly, the Commission concluded that the additional unbundling of Project Pronto was required in the public interest and consistent with the factors in Wis. Stat. § 196.03(6). *Final Decision* at p. 113-114. Additionally, the Commission determined that the CLECs were impaired without this offering, with the meaning in 47 U.S.C. § 251(d)(2) and 47 C.F.R. § 51.317. (*Final Decision* at p. 116.)

The further issue to address is the meaning of the Commission's requirement that SBC offer, as an end-to-end UNE, all transmission options consistent with the FCC's *Project Pronto Waiver Order*. SBC argued that tariffing its Broadband Service Offering provides all the transmission options required by the FCC's *Project Pronto Waiver Order*. The Commission in its *Final Decision* did not limit its requirement to only tariffing the Broadband Service Offering. The Commission concluded:

[SBC's] Broadband Service offering does not remedy the impairment to CLECs seeking to offer DSL services different from those offered by AADS unless the various versions are made into end-to-end UNE options. Making Project Pronto a UNE will assure the continued offering and TELRIC pricing of access to the Project Pronto loop network. It will also allow Commission oversight of [SBC's] efforts to meet its obligation under the Project Pronto Order to pursue line card options for CLECs. Further, unbundling of Project Pronto [into piece parts] may be necessary if [SBC] does not meet its obligations under the Project Pronto Order to pursue line card options for CLECs. (*Final Decision* at p. 117)

This analysis required the unbundling of Project Pronto in the form of various versions made into end-to-end UNEs to allow a variety of advanced service offerings. SBC relied upon the following language to support its position, "Instead, the Commission is unbundling Project Pronto as it is packaged and sold as a single product."¹¹ This sentence, however, has limited application because it is included in the discussion of whether piece parts of Project Pronto should be unbundled and whether the packet switching criteria must be met.

In addition, similar language in the *Final Decision*, "the Commission requires the Broadband Service to be unbundled,"¹² is presented in the context of making the Broadband UNE a mandatory offering as opposed to voluntary offering, not in the analysis of unbundling.

¹¹ *Final Decision* at p. 116.

¹² *Final Decision* at p. 115.

When viewed in its entirety, the Commission determined that it required, not just the Broadband Service Offering, but Project Pronto to be unbundled on an end-to-end basis.

Of particular importance to the Commission is that SBC meet its obligations under the FCC's *Project Pronto Waiver Order* to pursue line card options for the CLECs. The FCC's Project Pronto Waiver Order includes the following analysis:

SBC's proposal, as modified in this proceeding, will help ensure that consumers will have a wide array of choice. Specifically, SBC commits to making available all features, functions and capabilities of the equipment installed in remote terminals at just, reasonable, and nondiscriminatory rates, terms, and conditions. For example, under this commitment, SBC's incumbent LECs will provide additional classes or qualities of service, other bit rate offerings, different combinations of permanent virtual connections, remote testing, and other features, functions, and capabilities made available by the manufacturer. SBC's commitment applies both to existing and to future features, functions, and capabilities. Should the manufacturer develop new features or plug-in cards with different capabilities SBC's commitment provides a process for competitive LECs to seek such capabilities. Competitive LECs may request existing and future features, functions and capabilities either through SBC's public forums or by contacting SBC directly. We view this commitment as critical to ensuring the SBC incumbent LECs do not discriminate against competitors wishing to innovate and to use the full functions and capabilities of the equipment. Through this commitment, SBC's competitors will receive assurances that SBC's incumbent LECs will not restrict the use of the equipment to the method of operation chosen by SBC, thus restricting competition and innovation in the advanced services marketplace.¹³

Based on this analysis the FCC imposed the following requirements:

4. Features and Functions

(a) Existing Features and Functions. Upon request and except as described below, SBC/Ameritech incumbent LECs will make available to all telecommunications carriers (including SBC/Ameritech's separate Advanced Services affiliate(s)) all technically feasible Advanced services features and

¹³ In the Matter of Ameritech Corp., Transferor and SBC Communications, Inc., Transferee; For Consent to Transfer Control of Corporations Holding Commission Licenses and Lines Pursuant to Sections 214 and 310(d) of the Communications Act and Parts 5, 22, 24, 25, 63, 90, 95, and 101 of the Commission's Rules, CC Docket No. 98-141; 15 FCC Rcd 17521; 2000 FCC Lexis 4764; September 8, 2000, Released; Adopted September 7, 2000 (*Project Pronto Waiver Order*) para. 42 (In the *Project Pronto Waiver Order*, the FCC waived a restriction on the ILEC's ability to own advanced services equipment. In the FCC's *SBC/Ameritech Merger Order*, the FCC had required a separate affiliate and not the ILEC to own all advanced services equipment.)

functions of equipment (e.g. ADLU card) installed in remote terminals where the SBC/Ameritech incumbent LEC deploys a NGDLC architecture that supports both POTs and xDSL services. ...

(b) Future Features and Functions. As to xDSL features and functions that vendors may develop in the future for use on SBC/Ameritech incumbent LEC equipment deployed in remote terminals, the SBC incumbent LECs will evaluate and discuss with interested telecommunications carriers in collaborative sessions described in Paragraph 8 below such features or functions, including response to specific requests from telecommunications carriers, to determine whether there is a practical and technically feasible means to deploy such features and functions where the SBC/Ameritech incumbent LEC deploys a NGDLC architecture that supports both POTs and xDSL services.

...
When making purchasing decision with respect to future xDSL features and functions, SBC/Ameritech shall evaluate both retail and wholesale customer needs. ...

...
8. Industry Collaborative Sessions. No later than September 1, 2000, SBC/Ameritech incumbent LECs shall begin hosting collaborative sessions with all interested telecommunications carriers, including its separate Advanced Services affiliate(s), vendors, and other members of the telecommunications industry to address operational and technical issues regarding access to NGDLC remote terminals and new types of xDSL features and functions that may be provided via NGDLC. Any transcripts and summaries of action items that may result from such sessions will be made publicly available.

During such collaborative sessions the following types of issues will be addressed regarding features and functions that are requested to be deployed by the SBC/Ameritech incumbent LECs: technical and operational feasibility; commercial arrangements pertinent to the deployment of such features and functions and how those costs (e.g. cost of procuring, developing, provisioning, deploying and maintaining such features and functions) will be recovered; whether technical, operations support system and operational trials will be needed and how they will be conducted; and whether such features and functions will reduce the capacity of remote terminals to meet forecasted demand for advanced services and POTs. The SBC/Ameritech incumbent LECs will approach such discussions from the presumption that it seeks to optimize the use of their network by affiliated and unaffiliated carriers and to support the development of new xDSL features and functions.

Clearly, in the *Final Decision* the Commission determined that various versions of the transmission types made possible through the Project Pronto network should be made into

end-to-end UNEs to allow a variety of advanced service offerings. This issue is also well explained in an order of the Illinois Commerce Commission.¹⁴

Such a NGDLC UNE platform will achieve the same goals as a line card collocation requirement. This platform, combined with the requirement that Ameritech offer a modified platform when new line cards become available, ensures there will be sufficient demand for new line cards, and will also give CLECs an incentive to express to the licensed manufacturers of such line cards their preferences for line card features. Such manufacturers, recognizing that CLECs are the actual customers, will have a real incentive to incorporate innovative features and functionalities into new line cards. This is essentially the same scenario as with line card collocation, yet additional costs stemming from multiple owners of line cards at the RT would be avoided, as would administrative problems associated with inventorying of cards.

Additionally, in the *Final Decision*, the Commission considered SBC's "impact on network operations" analysis and found some merit in SBC's arguments. The Commission identified that this was a factor in determining that it would only require end-to-end unbundling, and not require unbundling of piece parts including collocation of CLEC line cards. (*Final Decision* at p. 106.) The Commission agreed with SBC that, with respect to line card collocation, there did appear to be technical feasibility concerns that could have a significant impact on SBC's operations. These included premature physical and bandwidth exhaustion of the NGDLC systems; inefficient utilization of the NGDLC system; operational problems; additional or earlier capital investments and delays and increased costs from a provisioning and maintenance perspective.

The Commission herein, however, determines that as in the FCC's *Project Pronto Waiver Order*, the features, functions, and capabilities that are made available by manufacturers are

¹⁴ Illinois Bell Telephone Company-Proposed Implementation of High Frequency Portion of Loop (HFPL)/Line Sharing Service, Order on Rehearing, docket 00-0393, September 26, 2001, p. 32.

presumed to be technically feasible unless persuaded otherwise.¹⁵ The Commission herein clarifies that it applies a presumption of technical feasibility when evaluating requests for features, functions, or capabilities offered by manufacturers, but will consider capacity constraints and significantly increased costs.

In light of SBC's narrow interpretation of the *Final Decision*, the Commission further clarifies herein that the Commission's unbundling requirements are (1) SBC shall pursue line card options for the CLECs, as described in FCC's *Project Pronto Waiver Order*; (2) SBC shall offer a modified end-to-end Broadband UNE when new line cards become available; (3) SBC shall make available to all telecommunications providers including SBC's Advanced Services affiliate(s) all technically feasible advanced services features and functions of equipment (e.g. ADLU card) installed in remote terminals that deploy a NGDLC architecture that supports both voice and xDSL services; this requirement applies to both existing and future features, functions, and capabilities; and (4) features functions and capabilities are presumed to be technically feasible when they are offered by manufacturers unless SBC provides persuasive evidence otherwise that capacity restraints or significantly increased costs will occur.

The CLECs asserted that their proposed tariff modifications provide transmission options which they deem possible. The CLECs asserted that these transmission options should be viewed as a minimum list to which additional options should be made available by request from competitors. The Commission does not have a factual record by which to evaluate these proposed transmission options. However, the Commission requires SBC to view these options as requests from CLECs. As clarified in this order, this means SBC is required to either provide

¹⁵ *Project Pronto Waiver Order* par. 44.

these options or persuade the Commission of technical infeasibility giving consideration to capacity constraints and significantly increased costs.

Line Splitting

The terms line splitting and line sharing are defined as follows: SBC's provision of the HFPL to competitors while SBC is the provider of the voice frequency service to customers is referred to as "line sharing."¹⁶ Alternatively, SBC refers to the arrangement where both the HFPL and the voice frequency portion of loop are utilized by either a single CLEC or two CLECs as "line splitting." Line splitters are passive devices which divide the high frequency from the voice frequency signals.

The CLECs asserted that SBC's proposed tariffs do not require SBC to provide line splitters such that CLECs can engage in line splitting using SBC-owned line splitters. (Consolidated Document p. 63) The CLECs asserted SBC's proposed tariffs included line splitting prohibitions that are inconsistent with the *Final Decision*. The Commission, in its *Final Decision*, referred the determination of the availability of line splitters to docket 05-MA-120, *Petition for Arbitration to Establish an Interconnection Agreement Between Two AT&T Subsidiaries, AT&T Communications of Wisconsin, Inc. and TCG Milwaukee, and Wisconsin Bell, Inc. (d/b/a Ameritech Wisconsin)*, an arbitration proceeding between AT&T Communications of Wisconsin ("AT&T") and SBC ("AT&T/SBC arbitration"). The last order the Commission issued in docket 05-MA-120, was the *Order Rejecting an Interconnection Agreement* dated March 12, 2002. That order required SBC to provide line splitters for line splitting and line sharing.

¹⁶ *Line Sharing Order* at p. 4.

Additionally, another Commission order also relied on the AT&T/SBC arbitration for the availability of line splitters for use in line splitting and line sharing. That was the Commission's December 15, 2000, order in *Investigation Into Ameritech Wisconsin Operational Support Systems*, docket 6720-TI-160. That order adopted a Settlement Stipulation.

The Settlement Stipulation required SBC to provide line splitters for both line splitting and line sharing as determined in the AT&T/SBC arbitration proceeding. The Settlement Stipulation reduced the number of issues that otherwise would have required resolution by the Commission through a hearing. The Settlement Stipulation was not limited to the signors of that stipulation but was to be applied industry-wide to resolve these issues. In this manner, the requirements of the AT&T/SBC arbitration have implications industry-wide and were referred to by these Commission orders as a reflection of the Commission's policy determination on this issue.

SBC opposes the CLECs' claim that SBC is required to provide line splitters on the grounds that the only final, non-appealable decision in that AT&T/SBC arbitration proceeding was the Commission's July 11, 2002, order approving an interconnection agreement, which it asserted does not require SBC to provide line splitters. While SBC is correct that the final interconnection agreement that was submitted and approved did not include the required line splitter provision, that agreement and related order were not part of the arbitration docket. Both the Commission's *Final Decision* in this proceeding and its December 15, 2000, order in docket 6720-TI-160 adopting a Settlement Stipulation relied on the arbitration docket for the Commission's determination of the line splitter issue, and the outcome of that arbitration docket

was the *Order Rejecting an Interconnection Agreement*, which required the provision of line splitters.

The sequence of these dockets is as follows. The Arbitration Panel Award in docket 05-MA-120 on October 12, 2000, decided that SBC was required to provide line splitters as ancillary equipment-that is, a line splitter is part of the loop network element. In reviewing that award, the Commission, in the *Order Rejecting an Interconnection Agreement* in docket 05-MA-120¹⁷ agreed with the arbitration panel's determination that SBC was required to provide line splitters. The Commission determined that it was not preempted from making this determination by the FCC, and that it had independent state authority to do this. The Commission ordered specific language on this requirement to be provided in section 9.3.2.3 of the arbitration agreement. (*Order Rejecting an Interconnection Agreement* at p. 19.)

However, AT&T and SBC later submitted an interconnection agreement to the Commission for approval which deleted section 9.3.2.3 and the line splitter requirement. This agreement, however, was submitted to the Commission as a negotiated, not an arbitrated, interconnection agreement. This difference is significant because negotiated agreements are subject to a lesser standard of Commission review than arbitrated ones. *See* 47 U.S.C. § 252(e)(2)(A) and (B).

Specifically, negotiated agreements may be rejected only if the agreement discriminates against a carrier not a party to the agreement, or the agreement is contrary to the public interest.

¹⁷ Petition for Arbitration to Establish an Interconnection Agreement Between Two AT&T Subsidiaries, AT&T Communications of Wisconsin, Inc., and TCG Milwaukee, and Wisconsin Bell, Inc. (d/b/a SBC Wisconsin), Docket 05-MA-120, Order Rejecting an Interconnection Agreement, mailed March 15, 2002 (see Commission decision with respect to Issue 34, pages 20-21).

Docket 6720-TI-161

See 47 U.S.C. § 252(e)(2)(A). In contrast, an arbitrated agreements must meet the unbundling and pricing requirements of 47 U.S.C. §§ 251 and 252 before approval.

The Commission accordingly assigned the matter a new a docket number, 05-TI-656, with a new title, *Application for Approval of the Interconnection Agreement Between AT&T Communications of Wisconsin, LP and Wisconsin Bell, Inc. (d/b/a Ameritech Wisconsin)*. On July 11, 2002, this agreement was approved by the Commission as an agreement that was arrived at through voluntary negotiations in docket 05-TI-656. The order approving the agreement, however, was not part of the arbitration docket, and was not a determination on the merits of the issues in the arbitration, including the line splitter issue. Accordingly, SBC cannot rely on that order to avoid making line splitters available to CLECs.

SBC's additional arguments that other court decisions or FCC's orders do not require line splitting are irrelevant here because the Commission's final order, which was not appealed, has already determined this issue. Moreover, if the Commission relied on the order in docket 05-TI-656, all the CLECs that relied on the Arbitration Panel's Award and the Commission's March 15, 2002, *Order Rejecting an Interconnection Agreement* requiring line splitters would be treated unfairly. These CLECs agreed to the Settlement Stipulation in 6720-TI-160, and in doing so, gave up an opportunity to address the issue through hearing. In addition in developing their business plans, it was reasonable for them to rely on these Commission orders as a statement of Commission policy. To avoid this inequity, the Commission determined that it will apply the requirements in its *Order Rejecting an Interconnection Agreement* and not the subsequent approval of an interconnection agreement in docket 05-TI-656 when enforcing the Settlement Stipulation and the requirements of the

Final Decision. SBC is required to provide line splitters. SBC is required to remove its prohibitions on line splitting.

The Commission also makes a further decision regarding line splitting associated with its requirement that SBC provide a Broadband end-to-end UNE, which will also be discussed in detail below.

Line Splitting in Project Pronto

The CLECs further argued that because the Commission required SBC to provide a Broadband end-to-end UNE, and in light of the technology, the Commission effectively required SBC to line split. The Commission agrees with the CLECs' analysis. SBC's proposed tariff, which turns its Broadband Service Offering into a UNE, does not include a line splitting option. SBC's Broadband UNE offers only three options, (1) a "data only" option; (2) data with SBC providing the voice service (line sharing) and (3) a combined voice and data option where a single CLEC purchases both voice and data. It does not include an option to purchase data while another CLEC purchases the unbundled voice frequency from SBC which would be a line splitting option. SBC asserted that it does provide line splitting, in that using option three, CLECs can sell the voice or data frequency to a third CLEC and set up its own "line splitting arrangement."

Option three, however, does not provide all forms of line splitting because it does not allow a CLEC to purchase the data frequency when another CLEC has purchased the voice frequency from SBC. The Commission agrees with the following CLEC analysis.

Because the Asynchronous Digital Line Unit (ADLU) used by Project Pronto in the DSL-capable remote terminal, inherently provides the splitting function, routing the independent voice and data signals over two completely separate fiber optic transmission paths back to the central office, no additional equipment is

required by Ameritech to facilitate line splitting using the Broadband UNE. “Splitting” the DSL-based voice and data signals is an inherent part of the Broadband UNE. As such, to allow carriers to “line split” using the Broadband UNE, [SBC] need only be required to remove its prohibitions limiting carriers from terminating individual voice and data cross-connect elements to two different collocation cages (one for the voice provider and the other for the data provider). No additional equipment or effort on [SBC’s] part is required to accomplish line splitting in this scenario. (Consolidated Document at p. 65)

The Commission determines that by unbundling Project Pronto, it requires all forms of line splitting. As described above, the Commission required more of SBC than just making its Broadband Service Offering into a UNE. The Commission requires SBC to make available to all telecommunications providers all the technically feasible advanced services features and functions of the equipment installed in remote terminals that deploy a NGDLC architecture that supports the provision of both voice and xDSL services. The Commission presumes that features, functions and capabilities are technically feasible when they are offered by manufacturers unless SBC provides persuasive evidence otherwise that capacity restraints or significantly increased costs will occur. The Commission determines that there are no other providers that could be similarly situated as SBC and able to offer comparable services at comparable prices. This is a result of the efficiencies SBC obtains through the Project Pronto architecture including the leveraging the scale of operations through its existing voice customers. CLECs are impaired in their ability to provide the services they seek to offer. The Commission applies a presumption that an option is technically feasible if a manufacturer makes such an option available. As the NGDLC architecture provides the line splitting functionality, it is available from manufacturers. Accordingly, SBC is required to provide that functionality to the CLECs.

Unbundled Local Switching

Weighting of Growth and Replacement Lines

The CLECs asserted that SBC failed to comply with the *Final Decision*'s requirement to determine the price of switching equipment based on 70 percent lower cost replacement lines and 30 percent higher cost growth lines.¹⁸ SBC used a different method of weighting lines in its May 21, 2002, compliance filing that it asserted did comply with the Commission's weighting requirement. The Commission herein adopts the CLECs' method of implementing the weighting growth and replacement lines.

SBC asserted in its September, 2002, response that the relationship of Total Replacement lines to Total Growth lines was in fact 70 percent replacement and 30 percent growth each year. The CLECs in their August, 2002, comments identified that when looking at the allocation used for each manufacturer, that lines purchased from Lucent are weighted more heavily with growth lines, leaving lines purchased from Nortel and Siemens more heavily weighted with the lower cost replacement lines. The prices vary per manufacturer. The CLECs explained that while the cost differences balance out with little difference in costs for unbundled local switching, they do not balance out for trunk port investments which are a component of unbundled local transport. The CLECs explained that SBC's weighting gave seven percent higher transport rates than a simple application of 70 percent and 30 percent by vendor. SBC, in its September, 2002, response, did not explain why there should be a different percentage by manufacturer, but only that the end result complied with the Commission's requirement. SBC did not explain why its

¹⁸ *Final Decision* at p. 70 When an entire switch is removed and replaced, manufacturers offer a lower price per line. Once a switch is installed and there are incremental expansions of capacity, manufacturers charge a higher cost per line.

method would be preferable to the CLECs' method. The CLECs' method is simple and rational. Accordingly, the Commission determines herein that the CLECs' method of weighting growth and replacement lines is a more reasonable interpretation of the Commission's *Final Decision* requirement and should be used.

Double Recovery of SS7 costs

The CLECs asserted that SBC would double recover SS7 costs. SBC responded that the two charges in question covered different portions of the signaling system and did not double count costs. The Commission accepts SBC's response that SS7 costs are not double counted.

The CLECs asserted that SBC's unbundled local switching-shared transport ("ULS-ST") charge includes the same costs as its ULS-ST SS7 charge, and accordingly that costs are double recovered. As a solution the CLECs recommended that the Commission should eliminate the ULS-ST SS7 charge.

This issue does not, however, appear to be related to compliance with the Commission's *Final Decision*. Instead, it appears to be a new cost study method issue that was not raised at the time the Commission made its *Final Decision*. In addition, SBC appears to have a reasonable response. SBC explained that provisioning ULS-ST requires additional signaling functionality that is not included in the SS7 rate. SBC described different links between different transfer and control points. Based on the information presented, the Commission determines that it was not necessary to reevaluate its *Final Decision* in light of this potential issue.

Other Issues

Joint and Common Mark-up

Ameritech's adjustment to the TELRIC plant-related expenses

Staff identified that SBC made an unauthorized adjustment in its May 21, 2002, compliance filing, to the joint and common model. That adjustment purportedly flowed-through adjustments the Commission made in its *Final Decision* to SBC's TELRIC models to another model, the joint and common model. The Commission herein requires SBC to remove its adjustment. The calculation should be performed in the same manner as SBC provided in response to staff's data request.

The Commission's determination of this issue requires the resolution of multiple complex subissues in order to reach the ultimate conclusion. These subissues include: (1) the mechanics of the accounting-based joint and common cost model and SBC's classification of costs in this model between the costs that are joint and common costs and those which are not; (2) the adjustment that SBC proposed and SBC's defense of its proposal; (3) the difficulties associated with carrying an adjustment from the TELRIC models to the accounting-based joint and common model, using spare capacity as an example of an adjustment to a TELRIC model; and (4) the lack of a record on which to base such a flow-through of an adjustment from one model to another.

In its ultimate determination, the Commission concludes that there is no record to support SBC's proposed adjustment, and the accounting-based joint and common model on a stand-alone basis-without SBC's proposed adjustment-provides a reasonable means of determining joint and common costs.

SBC's joint and common cost model as presented in the February, 2001, hearing, determined the mark-up that is later applied to the results of the TELRIC models so that SBC may recover costs such as corporate overhead. The SBC joint and common cost model determined the mark-up by forecasting joint and common costs starting from historical accounting records for joint and common costs. The joint and common model divides those costs by TELRIC plant-related expenses, which were also developed from historical accounting records. This computes a ratio between one type of cost and another which is applied as the mark-up.¹⁹

The term "TELRIC plant-related costs" describes one of the categories into which SBC classified its accounting costs. The TELRIC plant-related costs include the same kind of costs that are forecast by TELRIC models. For example, the TELRIC models forecast the cost of plant by forecasting the number of feet of cable and wire that will be needed to reach customers multiplied by the materials prices included in SBC's contracts.

Accordingly, cable and wire is a type of cost that is forecast in the TELRIC models. Alternatively, the joint and common classification includes the kind of costs that are not forecast within the TELRIC models. Corporate overhead costs are not forecasted in the TELRIC models and therefore are classified as joint and common costs.

Staff identified, in its August, 2002, data request, that SBC made an adjustment to decrease the TELRIC plant-related expenses, the denominator which led to an increased mark-up

¹⁹ While not on this record, staff used a similar ratio method in docket 6720-TI-120 to compute the mark-up instead of an Arthur Anderson method. However, staff developed the denominator based on what was referred to as extended TELRIC. Extended TELRIC was computed by multiplying the TELRIC rates times the annual volumes for each UNE. The annual volumes had been available from the data on the resale discount that was not evaluated in this proceeding.

for joint and common costs, such that all UNEs would be priced about five percent higher.²⁰

This adjustment was made in a manner that made it difficult to notice that an adjustment was proposed. The number in question changed from one page of the cost study to the next with no explanation that there was a change and with no supporting calculations explaining the change. Staff, in a preliminary oral data request, asked SBC to provide the basis for the adjustment.

In response to this request, SBC provided supporting calculations. SBC explained that the TELRIC plant-related costs were adjusted to reflect the effect of the Commission's adjustments to all the TELRIC models. In particular, after reviewing the calculations, staff and SBC together clarified the issue, specifically identifying that the Commission's *Final Decision* adjustment to fill factors in the TELRIC models was the biggest component in SBC's proposed adjustment.

The fill factor is the method the TELRIC models use to add in the cost of spare capacity. Staff and SBC clarified that the question is whether the joint and common cost model that was based on accounting costs should be adjusted for changes that the Commission made to SBC's other TELRIC models.

SBC argued in its September, 2002, response that if it were required to maintain the use of its greater amount of spare capacity in its shared and common cost study, and at the same time was required to use a much lower amount of spare capacity as ordered by the Commission in calculating the UNE rates which competitors actually pay, then SBC would be forced to maintain two sets of TELRIC books; one set of low investment numbers that yield low TELRIC rates for competitors; and one set of high investment numbers used to drive down the shared and common cost these same competitors are required to pay.

²⁰ In other words, it increases the mark-up from around 20 percent to around 25 percent.

SBC argued that keeping two sets of books, with significantly different numbers, is no more proper or lawful here than it would be in the case of the accounting ledgers of a public company. SBC further asserted that in order to apply the same direct investment numbers in the shared and common cost model as the direct investment numbers used in TELRIC rates the link between levels of fill in both studies needs to be maintained.

However, the Commission determines herein that it was SBC's cost studies, as originally filed in the February, 2001, hearing, that mix and match accounting and TELRIC methods. The cost studies SBC submitted at the hearing used TELRIC models for the plant-related costs of UNEs on the one hand and used an accounting model to determine joint and common costs on the other hand. The Commission determines herein that the TELRIC models are not a set of accounting ledgers; they are a method for modeling costs. There is nothing, however, inherently wrong with SBC's approach. The accounting-based joint and common model develops a ratio between plant related costs and joint and common costs which it applies to the TELRIC models for plant related costs. This method does not unlawfully require two sets of books, with significantly different numbers.

Additionally, staff identified, in its August, 2002, data request, that there is no record in this proceeding that evaluates how to adjust the accounting model for changes in spare capacity to reflect the level of spare capacity in the TELRIC models. SBC did not assert in its briefs or on the record that a change in the TELRIC models should flow through to the accounting model. A method to make such an adjustment was never proposed. The joint and common model is based on accounting costs and is a reasonable method on a stand alone basis to determine joint and

common costs. The model computes a ratio between one type of cost and another. That ratio is then applied as the mark-up.

SBC and staff used the example of the Commission's fill factor adjustment in discussing how models might be adjusted. During the February, 2001, hearing SBC argued that TELRIC models should include a fill factor that is based on its actual level of spare capacity. The Commission did not adopt SBC's proposed actual level of spare capacity for reasons discussed in the *Final Decision*. The Commission determines that a fill factor should be used which provides for less spare capacity than SBC proposed.

Staff explained in its August, 2002, data request that the amount of costs that should be removed from the accounting models to reflect less spare capacity could be minimal and therefore difficult to determine. For example, the accounting records already include the full cost of digging a trench. The additional costs to provide spare capacity that would have been recorded in the accounting records would only be the added costs to put more cable and wire into a trench that was already dug. SBC's proposed adjustment in its compliance filing, reduced costs proportionally. If one third of the spare capacity is removed, then one third of the total costs, including that of the trench, was removed. SBC supported this treatment using the logic explained by its witnesses that the cost to return and dig a second trench, if it is found that more capacity is needed, could increase costs by as much as fifty fold.

The Commission herein determines that no method was proposed on the record to modify the accounting-based joint and common model for adjustments the Commission made to the TELRIC models. Different possible methods presented in the compliance phase give vastly different results. The accounting model was presented as a model that computes a ratio between

various types of costs. It provides a reasonable method on a stand alone basis for determining joint and common costs. It is reasonable for the Commission to direct SBC to remove its adjustment to the joint and common model. The calculation should be done in the same manner as SBC provided in response to staff's August, 2002, data request.

SBC's Addition of OSS Testing Costs to Joint and Common Costs

Staff, in its August, 2002, data request, identified that SBC made an adjustment in its May 21, 2002, compliance filing, to add OSS testing costs to joint and common costs, which accordingly increased the mark-up for joint and common costs. The Commission determines herein that it will allow the addition of OSS testing costs to the joint and common costs for the reasons discussed below. However, SBC is not allowed to implement this adjustment until completion of a comment process and determination of a reasonable amount of OSS testing costs to include in joint and common costs.

SBC, in its September, 2002, response, explained that the Commission in its *Final Decision* determined that costs incurred to make UNEs available should be labeled "competition implementation costs" and placed in the "Network Support" category so the costs would be shared by all users of the network. While SBC still disagreed with the Commission's adjustment, SBC argued, in its September, 2002, response, that if costs are considered to be "competition implementation costs," then OSS testing costs should be allowed. SBC argued that OSS testing expenses are costs incurred to make UNE's available; in addition, they have been (and will be) incurred at the CLECs' insistence and like the other costs the Commission classified as "competition implementation costs" were incurred to implement the opening of the

local exchange market to competition. Accordingly, SBC asserted it must be permitted to recover these OSS testing costs via inclusion in the Network Support category.

Staff's concern was procedural. Staff, in its August, 2002, data request, asserted that SBC added this adjustment in a manner that obscured whether an adjustment was even being proposed. In order to find that SBC inserted an adjustment, staff compared the cost study originally presented in the February, 2001, hearing to the May 21, 2002, cost study and found that the amount of Corporate Overhead costs had changed. SBC in its May 21, 2002, compliance filing, neither identified or explained that there was an adjustment nor offered supporting calculations. SBC only identified that the costs were OSS testing costs in response to staff's inquiries in the discovery process.

Staff, in its August, 2002, data request, questioned whether these cost should be allowed to be included in the compliance phase of this docket. Staff inquired where in the *Final Decision* was SBC instructed to make this adjustment as the Commission expressed its concern in the *Final Decision* "that no adjustments other than those required by the Commission are made."²¹

While the Commission shares staff's procedural concerns, the Commission agrees with SBC that OSS testing costs are a form of "competition implementation costs," and accordingly should be afforded the same treatment as other "competition implementation costs." With the quantity of publicly available information available, the Commission determines it would be reasonable to use a comment process to implement this adjustment.

The Commission is concerned, however, that because joint and common costs are added to every UNE, implementing this change could significantly delay the finalization of UNE rates.

²¹ *Final Decision* at p. 188.

In light of this and the other procedural concerns, the Commission determines that SBC should not be allowed to implement this adjustment until completion of the comment process and a Commission determination of a reasonable amount of OSS testing costs to be included in the network support category. As this decision modifies the *Final Decision*, rates should not be retroactive to May 21, 2002, but should be implemented on a going-forward basis following such a determination by the Commission.

Joint and Common Costs-Investment Growth Adjustment

Staff identified that SBC made the Commission's investment growth adjustment to only incremental price increases and not to the full plant investment. The Commission determines that its investment growth adjustment should be applied to the full plant investment.

SBC explained that it read the *Final Decision* as rejecting SBC's proposed Telecommunications Plant Indices ("TPI") adjustments. SBC asserted that if it were required to aggregate the two sets of adjustments, i.e. apply both the TPI and the CLEC-suggested investment growth adjustments, the result would be a "mixed bag." Total investment would increase in some cases, such as cable, and would decline materially in others such as switching.

To the contrary, the Commission determines that having the investment increases for some types of plant and decreases for others is a reasonable result and finds no reason why a "mixed bag" would be unreasonable. The *Final Decision* explained that SBC only forecast the future replacement cost for its current plant, and did not consider the fact that the number of access lines would also increase.²² It is reasonable for the investment in cable to increase due to the increase in number of access lines and changing prices, and for the investment in switching

²² *Final Decision* at p. 35.

to decrease as line growth does not lead to immediate switch replacement and switching costs have been declining. Accordingly, the Commission herein determines it is reasonable to require SBC to apply the investment growth adjustment to the full investment and not just the incremental price increase. The calculation should be performed in the same manner as SBC provided in response to staff's August, 2002, data request.

Maintenance Factor

In reviewing the maintenance factor in SBC's compliance filing, staff identified that SBC applied a productivity factor of 3 percent and did not compound the productivity factor over three years. In addition, staff noticed that SBC implemented the Commission's requirement to remove maintenance expenses in proportion to the amount of fully depreciated plant, in a manner that did not result in any change to the maintenance factor. The Commission herein determines that the productivity factor should be compounded over three years and a reduction should be made to the maintenance factor using data from the amount of fully depreciated plant.

Staff identified that SBC used 1998 as the base year in its models and forecasted expenses to the year 2001, in the February, 2001, hearing. Accordingly, staff expected to see a productivity adjustment of 8.7 percent $(1 - (.97)^3)$. SBC explained that it interpreted the Commission three percent to be the entire productivity adjustment. The Commission determines that the compounding method is a more reasonable interpretation of its *Final Decision* and should be used.

SBC also explained that it removed both plant investment associated with fully depreciated plant and expenses associated with fully depreciated plant which resulted in no change to the maintenance factor. Staff pointed out that the Commission adopted the CLECs'

proposal for the removal of a portion of maintenance expenses. The CLECs' proposal did result in a decrease to the maintenance factor. The Commission determines that SBC's interpretation on this issue is not a reasonable implementation of its *Final Decision*. SBC is directed to make these adjustments in the same manner as was used to reply to staff's August, 2002, data request.

IDLC Conversion Costs

The Commission determines herein that it is necessary to hold an additional hearing for Integrated Digital Loop Carrier ("IDLC") Conversion costs. In its March 22, 2002, *Final Decision*, the Commission required IDLC Conversion costs to be collected as monthly recurring charges applicable to all unbundled loops based on a frequency of occurrence of one percent of the time with costs based on average actual historical experience. The Commission further ordered SBC to file cost studies in accordance with the requirements of the order within 60 days of the issuance of the order.

SBC did not include IDLC Conversion cost studies in its May 21, 2002, filing of its compliance cost studies. Staff in its August, 2002, data request informed SBC the cost study was missing and requested such a cost study. SBC submitted the IDLC cost study for the first time on September 10, 2002, with its reply comments. SBC proposed to charge \$1.15 per unbundled loop per month on all unbundled loops to recover IDLC conversion costs. The CLECs have not had an opportunity to comment on this cost study. In light of the materiality of the issue, the Commission determines that further hearings are necessary.

New Cost Studies

In order points 5 and 6 of the *Final Decision*, the Commission required SBC to submit cost studies for HFPL OSS and for Loop Qualification as there were no cost studies for these elements presented in the February, 2001, hearing.

SBC submitted the new cost studies in the May 21, 2002, filing of its compliance cost studies. SBC proposed to charge a nonrecurring charge of \$25.90 for manual loop qualification and a monthly recurring charge of \$.84 for HFPL OSS modification.

In their August, 2002, comments on the compliance filing, the CLECs stated they needed an opportunity to cross examine witnesses on the new cost information. In light of the new cost information filed and the CLECs' request for hearings, the Commission determines that it will require further hearings.

Implementation

The Commission is charged with determining whether rates for unbundled network elements comply with the FCC pricing rules. Prices for UNEs must comply with TELRIC pricing rules. The Commission's determinations in this proceeding comply with the FCC pricing rules. As explained in the *Final Decision*, this order does not establish UNE prices themselves, but determines the details of a methodology that can be used to determine cost-based prices as required. For example, the Commission made the determinations in its *Final Decision* for the appropriate cost of capital, depreciation rates, level of spare capacity (fill), contract prices and joint and common mark-up to comply with forward-looking TELRIC pricing standards to name a few of such details. The Commission set standards for determining when costs can be recovered through nonrecurring charges and when costs must be recovered through monthly

recurring charges. These details are to be used as guidelines and must be considered by Commission appointed arbitration panels, but if necessary they may be changed by the panel based on the facts and circumstances involved in a particular arbitration.²³ For example, the terms of an offering may differ from those priced in this proceeding such as including an additional amount of redundant routing, or there may be unbundled network elements that were not specifically addressed in this proceeding, such as access to 911 databases. Accordingly, resulting prices from this proceeding would be adjusted to reflect identifiable differences. However, when arbitration panels determine TELRIC compliant prices, arbitration panels must consider that the methods that the Commission adopted in this proceeding are TELRIC compliant. Variations from these resulting prices must be explained and consistent with the forward-looking costing principles discussed in the *Final Decision*.

As explained in the *Final Decision*, this order is a change of law. Interconnection agreements with change of law provisions shall be reopened and modified to be TELRIC compliant as determined by this order. Even if change of law provisions do not exist in interconnection agreements, this order determines TELRIC compliance and UNE rates are required to be modified to be TELRIC compliant. Accordingly, SBC is required to reopen all interconnection agreements and make revisions to be TELRIC compliant. Additionally, to remove incentives for delay, the Commission established subject-to-refund and true-up provisions.²⁴ The Commission has identified in this order where a determination was new or modified and not an implementation of the *Final Decision*. Unless an issue has been identified as a new or modified and not subject to true-up, the rates resulting from this order shall be

²³ *Final Decision* at p. 1.

²⁴ *Final Decision* at pp. 189-190.

subject to the true-up provision of the *Final Decision*. Interconnection agreements that have provisions for retroactive application of rates are required to make revised rates retroactive to May 21, 2002. The requirements of this order shall be implemented under the standard time intervals for negotiating and arbitrating interconnection agreements and with the option of purchasing from tariffs during such negotiations as made available in this order. Implementation may not be delayed regardless of any language that may appear in interconnection agreements about final or unappealable decisions, unless of course a court issues a stay of a particular requirement.

Now that it has made its implementation determinations, the Commission is concerned that the effect on rates be finalized as expeditiously as possible. The Commission required in its *Order Regarding Compliance Filing* that if parties proposed adjustments to SBC's May 21, 2002, compliance tariffs or costs studies, the party proposing the adjustment should also identify which UNE rates would be affected; the estimated effect on rates and the proposed modifications to draft tariffs if the Commission adopted their position on any issue. This allowed the Commission to be specific in this order as to its required adjustments.

Accordingly, where the Commission has made decisions on particular rate elements that adopted all of the CLECs' or all of SBC's proposed adjustments to a cost study or made only limited adjustments that could readily be hand computed, the Commission is now able to include in this order the rates that result from its selected cost study methods. The Commission has attached Appendix B that includes the rates resulting from its methodology for rate elements where it currently has sufficient information to do so. It is reasonable to require SBC to incorporate these rates into its tariffs for the purposes described in the *Final Decision*.

As a related issue, since the Commission issued its *Final Decision*, it has issued another order relevant to SBC's UNE rates. That is the order in docket 05-TI-349 issued on January 17, 2003, which specified the assignment of wire centers to zones for unbundled loops. SBC must comply with the requirements of that order when filing any compliance cost studies in this proceeding.

Additionally, SBC filed cost studies for operator services, directory assistance, 911 emergency number services and wireless emergency number services which it later withdrew. The Commission makes no decision in this order regarding SBC's assertions whether such elements are or are not UNEs. Further, no determination is made in this proceeding regarding TELRIC compliance for these elements. In addition, as the Commission vacated the Reciprocal Compensation portion of its *Final Decision* January 29, 2003, this order makes no determinations regarding appropriate rates for Reciprocal Compensation. Arbitration panels must consider the guidance the Commission has given in this order when establishing UNE rates for any other elements such as these.

In some cases, the Commission has determined how the cost study methods are required to be modified, but does not have sufficient information to identify the final effect on rates. In those circumstances, it is reasonable for the Commission to require SBC to file revised cost studies that comply with the Commission's decisions in this order. The rate elements that the Commission expects to finalize using this method are listed in Appendix B. SBC shall not make any adjustments that were not specifically required by this Commission in this order in the required compliance cost studies.

In addition, as the required modifications are very precisely identified in this order, it is reasonable for the Commission to rely upon staff to advise it whether its decisions have been accurately implemented. Accordingly, the Commission will issue a further order identifying the rates that comply with its cost study methods after it has received and reviewed the compliance cost studies.

In the *Final Decision*, the Commission determined that it would require tariffs to be filed which would be temporarily available to those competitors that have filed a request with SBC for interconnection and access to UNEs under 47 U.S.C. §§ 251 and 252. The tariffs are available until the negotiation or arbitration process has been completed.²⁵

To implement this tariffing decision, the Commission required SBC to file proposed tariffs in its compliance filing. However, in Wisconsin, when tariffs are placed on file, Commission approval is not required. Additionally, SBC is allowed to revise tariffs without Commission approval. Accordingly, when issues arise about the terms and conditions of offerings, it is expected that arbitration panels will determine whether terms of offerings are non-discriminatory and comply with federal and state requirements. The tariffs filed as a result of this proceeding do not limit an arbitration panel's ability to establish such compliant terms and conditions.

The Commission retains jurisdiction to hold further hearing and enter such further orders as necessary. A comment schedule is established in this order for those rate elements the Commission decided it would finalize through a comment process. A notice of hearing will be

²⁵ *Final Decision* at p. 185.

issued for those rate elements where the Commission determined that additional hearings are necessary.

Order

1. This order is effective upon issuance.
2. SBC shall file tariffs with the changes required in this order within XX days after the mailing date of this order that incorporate the rates for the rate elements in Appendix B.
3. SBC shall file revised cost studies within XX days after the mailing date of this order to implement the decisions in this order for those rate elements that Appendix B identifies will be determined through this process. SBC shall not make any adjustments that were not specifically required by this Commission in this order in the required compliance cost studies.
4. Comments regarding SBC's September 10, 2002, cost studies for the Administrative Charge, the Design and CO Connection charge, the Customer Connection charge, Manual Service Ordering charge and OSS testing costs shall be filed by mm/dd/yy and reply comments by mm/dd/yy by parties that wish to comment.
5. SBC shall add back the language it deleted from its tariffs which explained the Commission's decision in 6720-TI-120 regarding the ULS Usage Establishment charge. The method for the possible modification of monthly recurring ULS charges is also included that language to be reinserted. SBC shall remove the Billing Development charge from its tariffs.
6. SBC shall pursue line card options for the CLECs, as described in the *Project Pronto Waiver Order*.
7. SBC shall offer a modified end-to-end Broadband UNE when new line cards become available.

8. SBC shall make available all technically feasible features, functions and capabilities of the NGDLC architecture that supports both voice and xDSL services. This requirement applies to both existing and future, features, functions, and capabilities. Such features, functions, and capabilities are presumed to be technically feasible when they are offered by manufacturers.

9. SBC shall provide persuasive evidence that capacity restraints or significantly increased costs will occur in order to be allowed not to provide any technically feasible feature, function, or capability of the NGDLC architecture.

10. SBC shall provide the line splitting functionality of the NGDLC architecture to any requesting provider.

11. SBC shall treat the CLECs' proposed transmission options in the draft tariffs the CLECs submitted in this proceeding as requests for features, functions or capabilities of the NGDLC architecture.

12. SBC shall reopen interconnection agreements to reflect the Commission determinations in this proceeding regarding TELRIC compliance and required offerings.

Dated at Madison, Wisconsin, _____

By the Commission:

Lynda L. Dorr
Secretary to the Commission

LLD:GAE:AWW:slg:g:\order\pending\6720-TI-161 UNE compliance Final
See attached Notice of Appeal Rights

Notice of Appeal Rights

Notice is hereby given that a person aggrieved by the foregoing decision has the right to file a petition for judicial review as provided in Wis. Stat. § 227.53. The petition must be filed within 30 days after the date of mailing of this decision. That date is shown on the first page. If there is no date on the first page, the date of mailing is shown immediately above the signature line. The Public Service Commission of Wisconsin must be named as respondent in the petition for judicial review.

Notice is further given that, if the foregoing decision is an order following a proceeding which is a contested case as defined in Wis. Stat. § 227.01(3), a person aggrieved by the order has the further right to file one petition for rehearing as provided in Wis. Stat. § 227.49. The petition must be filed within 20 days of the date of mailing of this decision.

If this decision is an order after rehearing, a person aggrieved who wishes to appeal must seek judicial review rather than rehearing. A second petition for rehearing is not an option.

This general notice is for the purpose of ensuring compliance with Wis. Stat. § 227.48(2), and does not constitute a conclusion or admission that any particular party or person is necessarily aggrieved or that any particular decision or order is final or judicially reviewable.

Revised 9/28/98

Appendix A

In order to comply with Wis. Stat. § 227.47, the following parties who appeared before the agency are considered parties for purposes of review under Wis. Stat. § 227.53.

AMERITECH WISCONSIN

by

Mr. Michael T. Sullivan, Attorney (msullivan@mayerbrown.com)

Mr. Theodore A. Livingston, Attorney

Mayer, Brown & Platt (www.mayerbrown.com)

190 South LaSalle Street

Chicago, IL 60603

(PH: 312-782-0600 – Mayer, Brown & Platt)

(PH: 312-701-7251 / FAX: 312-706-8689 – Mr. Michael T. Sullivan)

AT&T COMMUNICATIONS OF WISCONSIN, INC.

by

Mr. Clark Stalker, Attorney

AT&T Corporate Center

222 West Adams Street, Suite 1500

Chicago, IL 60606

(PH: 312-230-2653 / FAX: 312-230-8211)

GTE NORTH INCORPORATED

by

Mr. Paul Verhoeven

State Manager - Regulatory Affairs/Tariffs

100 Communications Drive

P.O. Box 49

Sun Prairie, WI 53590

(PH: 608-837-1771 / FAX: 608-837-1733)

SPRINT COMMUNICATIONS COMPANY L.P.

by

Mr. Kenneth A. Schiffman

8140 Ward Parkway, 5E

Kansas City, MO 64114

(PH: 913-624-6839 / FAX: 913-624-5504)

KIESLING CONSULTING LLC

by

Mr. Scott Girard
8517 Excelsior Drive, Suite 301
Madison, WI 53717-1994
(PH: 608-664-9110 / FAX: 608-664-9112)
Email: sgirard@kiesling.com

MCLEODUSA TELECOMMUNICATIONS SERVICES, INC.

by

Mr. Dan M. Lipschultz
Senior Regional Counsel
McLeod USA
400 South Highway 169, Suite 750
Minneapolis, MN 55426
(PH: 952-252-5002 / FAX: 952-252-5299)

TIME WARNER TELECOM

by

Mr. Curt F. Pawlisch
Cullen, Weston, Pines & Bach, LLP
122 West Washington Avenue, Suite 900
Madison, WI 53703
(PH: 608-251-0101 / FAX: 608-251-2883)
(Email: pawlisch@cwpb.com)

CHARTER COMMUNICATIONS

by

Ms. Carrie L. Cox
Director Legal and Regulatory Affairs
440 Science Drive, Suite 101
Madison, WI 53711
(PH: 608-238-9690, ext. 287 / FAX: 608-231-3181)
(E-mail: ccox1@chartercom.com)

RHYTHMS LINKS, INC.

by

Mr. Craig Brown
Assistant General Counsel
Rhythms Links, Inc.
9100 East Mineral Circle
Englewood, CO 80112
(PH: 303-876-5335 / FAX: 303-476-2272)

TDS METROCOM, KMC TELECOM, MCLEOD USA,
CHARTER COMMUNICATIONS

by

Mr. Peter L. Gardon, Attorney
Reinhart, Boerner, Van Deuren, Norris & Rieselbach, S.C.
22 East Mifflin Street, Suite 600
P.O. Box 2018
Madison, WI 53701-2018
(PH: 608-229-2200 / FAX: 608-229-2100)

KMC TELECOM, INC.

by

Mr. Mark A. Ozanick
Regulatory Analyst
KMC Telecom Inc.
1755 North Brown Road
Lawrenceville, GA 30043
(PH: 678-985-6264 / FAX: 678-985-6213)

WISCONSIN DEPARTMENT OF JUSTICE

by

Mr. Edwin J. Hughes
Assistant Attorney General
123 West Washington Avenue
P.O. Box 7857
Madison, WI 53707-7857
(PH: 608-264-9487 / FAX: 608-267-2778)

CHORUS NETWORKS, INC.

by

Mr. Grant Spellmeyer
8501 Excelsior Drive
Madison, WI 53717
(PH: 608-826-4440 / FAX: 608-826-4300)

MCI WORLDCOM, INC.

by

Ms. Deborah Kuhn, Attorney
WorldCom, Inc.
205 North Michigan Avenue, 11th Floor
Chicago, IL 60601
(PH: 312-260-3326 / FAX: 312-470-5571)

WISCONSIN STATE TELECOMMUNICATIONS ASSOCIATION

by

Mr. Nick Lester
6602 Normandy Lane
Madison, WI 53719
(PH: 608-833-8866 / FAX: 608-833-2676)

TDS METROCOM

by

Mr. Nicholas D. Jackson, Director of Business Operations
1212 Deming Way, Suite 350
Madison, WI 53717
(PH: 608-663-3350 / FAX: 608-663-3340)

COMMUNICATIONS MANAGEMENT GROUP, LLC

by

Mr. Michael L. Theis
7633 Ganser Way, Suite 202
Madison, WI 53719-2092
(PH: 608-829-2667 / FAX: 608-829-2755)
(Email: miket@communicationsmgmt.com)

COVARD COMMUNICATIONS COMPANY

by

Mr. William J. Cobb III, Attorney
Senior Counsel
100 Congress Avenue, Suite 2000
Austin, TX 78701
(PH: 512-469-3781 / FAX: 512-493-3783)
(Email: bcobb@covad.com)

PUBLIC SERVICE COMMISSION OF WISCONSIN

(Not a party, but must be served)

610 North Whitney Way
P.O. Box 7854
Madison, WI 53707-7854

Courtesy Copies:

Mr. Niles Berman
Wheeler, Van Sickle & Anderson, S.C.
25 West Main Street, Suite 801
Madison, WI 53703-3398
(PH: 608-441-3824 / FAX: 608-255-6006)

Docket 6720-TI-161

Mr. Shane T. Kaatz
Manager Carrier Relations
TDS Metrocom
1212 Deming Way, Suite 350
Madison, WI 53717
(PH: 608-663-3149 / FAX: 608-663-3340)

Mr. Mark Jenn
Manager, Federal Affairs
TDS Telecom
P.O. Box 5158
Madison, WI 53705-0158
(PH: 608-664-4196 / 608-664-4184)

Mr. Peter J. Butler, Attorney
Ameritech WI
722 North Broadway, 14th Floor
Milwaukee, WI 53202-4396
(PH: 414-270-4555 / FAX: 414-270-4553)

Mr. Ron Walters, Regional Vice President
Industry Policy
Z-Tel
601 S. Harbour Island Blvd., Suite 220
Tampa, FL 33602

Ms. Pamela H. Sherwood
Vice President of Regulatory Affairs, Midwest Region
Time Warner Telecom
Suite 500
4625 West 86th Street
Indianapolis, IN 46268
(PH: 317-713-8977 / FAX: 317-713-8923)

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|---|--|--------------------|----------------|----------------|
| UNBUNDLED LOOPS - END TO END | | | | |
| | Analog 2w Basic - area A | TBD | | |
| | Analog 2w Basic - area B | TBD | | |
| | Analog 2w Basic - area C | TBD | | |
| | Analog PBX Ground Start - area A | TBD | | |
| | Analog PBX Ground Start - area B | TBD | | |
| | Analog PBX Ground Start - area C | TBD | | |
| | Analog COPTS Coin - area A | TBD | | |
| | Analog COPTS Coin - area B | TBD | | |
| | Analog COPTS Coin - area C | TBD | | |
| | Analog EKL - area A | TBD | | |
| | Analog EKL - area B | TBD | | |
| | Analog EKL - area C | TBD | | |
| | Analog 4 Wire - area A | TBD | | |
| | Analog 4 Wire - area B | TBD | | |
| | Analog 4 Wire - area C | TBD | | |
| | 64 Kbps Loop - area A | TBD | | |
| | 64 Kbps Loop - area B | TBD | | |
| | 64 Kbps Loop - area C | TBD | | |
| | 160 Kbps (ISDN) - area A | TBD | | |
| | 160 Kbps (ISDN) - area B | TBD | | |
| | 160 Kbps (ISDN) - area C | TBD | | |
| | 1.544 Mbps - area A | TBD | | |
| | 1.544 Mbps - area B | TBD | | |
| | 1.544 Mbps - area C | TBD | | |
| | DS3 - Band A | TBD | | |
| | DS3 - Band B | TBD | | |
| | DS3 - Band C | TBD | | |
| | DS3 C.O. Cross Connect | TBD | | |
| | ADSL 2W/HDSL 2W Compatible - area A | TBD | | |
| | ADSL 2W/HDSL 2W Compatible - area B | TBD | | |
| | ADSL 2W/HDSL 2W Compatible - area C | TBD | | |
| | ADSL 2W/HDSL 4W Compatible - area A | TBD | | |
| | ADSL 2W/HDSL 4W Compatible - area B | TBD | | |
| | ADSL 2W/HDSL 4W Compatible - area C | TBD | | |
| | Service Coord. Fee per account, per CO | TBD | | |
| | IDLC Conversion | Hearing Needed | | |
| Non-Recurring Rate Elements - Unbundled Loops - End to End | | | | |
| | Loop Conditioning | | | |
| | Conditioning for the removal of load coils, repeaters, excessive bridged tap per loop, per month | Docket 6720-TI-177 | | |
| | Manual Loop Qualification | | Hearing Needed | |

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|---------------------------|--|-----------|-------------|----------------|
| | Administrative Charge, per order - DS1 Service -NRC | | Comments | Comments |
| | Administrative Charge, per order - DS3 Service -NRC | | Comments | Comments |
| | Design and CO Connection Charge, per circuit - DS1 Service-NRC | | Comments | Comments |
| | Design and CO Connection Charge, per circuit - DS3 Service-NRC | | Comments | Comments |
| | Customer Connection Charge per Termination -DS1 Service-NRC | | Comments | |
| | Customer Connection Charge per Termination -DS3 Service-NRC | | Comments | |
| | Service Order- Initial -NRC | | \$0.07 | \$0.04 |
| | Service Order - Subsequent NRC | | \$0.07 | |
| | Service Order- Record Work Only NRC | | \$0.04 | |
| | Line Connection-NRC Stand alone UNE loop | | \$30.87 | \$3.89 |
| CO to ECS sub-loop | | | | |
| | 2 Wire Analog - area A | TBD | | |
| | 2 Wire Analog - area B | TBD | | |
| | 2 Wire Analog - area C | TBD | | |
| | 4 Wire Analog - area A | TBD | | |
| | 4 Wire Analog - area B | TBD | | |
| | 4 Wire Analog - area C | TBD | | |
| | 2 Wire DSL Compatible - area A | TBD | | |
| | 2 Wire DSL Compatible - area B | TBD | | |
| | 2 Wire DSL Compatible - area C | TBD | | |
| | 4 Wire DSL Compatible - area A | TBD | | |
| | 4 Wire DSL Compatible - area B | TBD | | |
| | 4 Wire DSL Compatible - area C | TBD | | |
| | 2 Wire ISDN Compatible - area A | TBD | | |
| | 2 Wire ISDN Compatible - area B | TBD | | |
| | 2 Wire ISDN Compatible - area C | TBD | | |
| | 4 Wire DS1 Compatible - area A | TBD | | |
| | 4 Wire DS1 Compatible - area B | TBD | | |
| | 4 Wire DS1 Compatible - area C | TBD | | |
| CO to RT sub-loop | | | | |
| | DS3 compatible subloop - Band A | TBD | | |
| | DS3 compatible subloop - Band B | TBD | | |
| | DS3 compatible subloop - Band C | TBD | | |
| CO to SAI Sub-Loop | | | | |
| | 2 Wire Analog - area A | TBD | | |
| | 2 Wire Analog - area B | TBD | | |
| | 2 Wire Analog - area C | TBD | | |
| | 4 Wire Analog - area A | TBD | | |
| | 4 Wire Analog - area B | TBD | | |

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|---------------------------------|---------------------------------|-----------|-------------|----------------|
| | 4 Wire Analog - area C | TBD | | |
| | 2 Wire DSL Compatible - area A | TBD | | |
| | 2 Wire DSL Compatible- area B | TBD | | |
| | 2 Wire DSL Compatible- area C | TBD | | |
| | 4 Wire DSL Compatible- area A | TBD | | |
| | 4 Wire DSL Compatible- area B | TBD | | |
| | 4 Wire DSL Compatible- area C | TBD | | |
| | 2 Wire ISDN Compatible - area A | TBD | | |
| | 2 Wire ISDN Compatible - area B | TBD | | |
| | 2 Wire ISDN Compatible - area C | TBD | | |
| | 4 Wire DS1 Compatible - area A | TBD | | |
| | 4 Wire DS1 Compatible - area B | TBD | | |
| | 4 Wire DS1 Compatible - area C | TBD | | |
| CO to Terminal sub-loop | | | | |
| | 2 Wire Analog - area A | TBD | | |
| | 2 Wire Analog - area B | TBD | | |
| | 2 Wire Analog - area C | TBD | | |
| | 4 Wire Analog - area A | TBD | | |
| | 4 Wire Analog - area B | TBD | | |
| | 4 Wire Analog - area C | TBD | | |
| | 2 Wire DSL Compatible - area A | TBD | | |
| | 2 Wire DSL Compatible- area B | TBD | | |
| | 2 Wire DSL Compatible- area C | TBD | | |
| | 4 Wire DSL Compatible- area A | TBD | | |
| | 4 Wire DSL Compatible- area B | TBD | | |
| | 4 Wire DSL Compatible- area C | TBD | | |
| | 2 Wire ISDN Compatible - area A | TBD | | |
| | 2 Wire ISDN Compatible - area B | TBD | | |
| | 2 Wire ISDN Compatible - area C | TBD | | |
| | 4 Wire DS1 Compatible - area A | TBD | | |
| | 4 Wire DS1 Compatible - area B | TBD | | |
| | 4 Wire DS1 Compatible - area C | TBD | | |
| ECS to SAI sub-loop | | | | |
| | 2 Wire Analog - area A | TBD | | |
| | 2 Wire Analog - area B | TBD | | |
| | 2 Wire Analog - area C | TBD | | |
| | 4 Wire Analog - area A | TBD | | |
| | 4 Wire Analog - area B | TBD | | |
| | 4 Wire Analog - area C | TBD | | |
| | 2 Wire DSL Compatible - area A | TBD | | |
| | 2 Wire DSL Compatible - area B | TBD | | |
| | 2 Wire DSL Compatible - area C | TBD | | |
| | 4 Wire DSL Compatible - area A | TBD | | |
| | 4 Wire DSL Compatible - area B | TBD | | |
| | 4 Wire DSL Compatible - area C | TBD | | |
| ECS to Terminal sub-loop | | | | |

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|---------------------------------|---------------------------------|-----------|-------------|----------------|
| | 2 Wire Analog - area A | TBD | | |
| | 2 Wire Analog - area B | TBD | | |
| | 2 Wire Analog - area C | TBD | | |
| | 4 Wire Analog - area A | TBD | | |
| | 4 Wire Analog - area B | TBD | | |
| | 4 Wire Analog - area C | TBD | | |
| | 2 Wire DSL Compatible - area A | TBD | | |
| | 2 Wire DSL Compatible - area B | TBD | | |
| | 2 Wire DSL Compatible - area C | TBD | | |
| | 4 Wire DSL Compatible - area A | TBD | | |
| | 4 Wire DSL Compatible - area B | TBD | | |
| | 4 Wire DSL Compatible - area C | TBD | | |
| ECS to NID sub-loop | | | | |
| | 2 Wire Analog - area A | TBD | | |
| | 2 Wire Analog - area B | TBD | | |
| | 2 Wire Analog - area C | TBD | | |
| | 4 Wire Analog - area A | TBD | | |
| | 4 Wire Analog - area B | TBD | | |
| | 4 Wire Analog - area C | TBD | | |
| | 2 Wire DSL Compatible - area A | TBD | | |
| | 2 Wire DSL Compatible - area B | TBD | | |
| | 2 Wire DSL Compatible - area C | TBD | | |
| | 4 Wire DSL Compatible - area A | TBD | | |
| | 4 Wire DSL Compatible - area B | TBD | | |
| | 4 Wire DSL Compatible - area C | TBD | | |
| | 2 Wire ISDN Compatible - area A | TBD | | |
| | 2 Wire ISDN Compatible - area B | TBD | | |
| | 2 Wire ISDN Compatible - area C | TBD | | |
| | 4 Wire DS1 Compatible - area A | TBD | | |
| | 4 Wire DS1 Compatible - area B | TBD | | |
| | 4 Wire DS1 Compatible - area C | TBD | | |
| | DS3 compatible subloop - Band A | TBD | | |
| | DS3 compatible subloop - Band B | TBD | | |
| | DS3 compatible subloop - Band C | TBD | | |
| SAI to Terminal sub-loop | | | | |
| | 2 Wire Analog - area A | TBD | | |
| | 2 Wire Analog - area B | TBD | | |
| | 2 Wire Analog - area C | TBD | | |
| | 4 Wire Analog - area A | TBD | | |
| | 4 Wire Analog - area B | TBD | | |
| | 4 Wire Analog - area C | TBD | | |
| | 2 Wire DSL Compatible - area A | TBD | | |
| | 2 Wire DSL Compatible - area B | TBD | | |
| | 2 Wire DSL Compatible - area C | TBD | | |
| | 4 Wire DSL Compatible - area A | TBD | | |
| | 4 Wire DSL Compatible - area B | TBD | | |

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|---|--------------------------------------|-----------|-------------|----------------|
| | 4 Wire DSL Compatible - area C | TBD | | |
| SAI to NID sub-loop | | | | |
| | 2 Wire Analog - area A | TBD | | |
| | 2 Wire Analog - area B | TBD | | |
| | 2 Wire Analog - area C | TBD | | |
| | 4 Wire Analog - area A | TBD | | |
| | 4 Wire Analog - area B | TBD | | |
| | 4 Wire Analog - area C | TBD | | |
| | 2 Wire DSL Compatible - area A | TBD | | |
| | 2 Wire DSL Compatible - area B | TBD | | |
| | 2 Wire DSL Compatible - area C | TBD | | |
| | 4 Wire DSL Compatible - area A | TBD | | |
| | 4 Wire DSL Compatible - area B | TBD | | |
| | 4 Wire DSL Compatible - area C | TBD | | |
| Terminal to NID sub-loop | | | | |
| | 2 Wire Analog - area A | TBD | | |
| | 2 Wire Analog - area B | TBD | | |
| | 2 Wire Analog - area C | TBD | | |
| | 4 Wire Analog - area A | TBD | | |
| | 4 Wire Analog - area B | TBD | | |
| | 4 Wire Analog - area C | TBD | | |
| | 2 Wire DSL Compatible - area A | TBD | | |
| | 2 Wire DSL Compatible - area B | TBD | | |
| | 2 Wire DSL Compatible - area C | TBD | | |
| | 4 Wire DSL Compatible - area A | TBD | | |
| | 4 Wire DSL Compatible - area B | TBD | | |
| | 4 Wire DSL Compatible - area C | TBD | | |
| Non-Recurring Rate Elements - Unbundled Sub - Loop | | | | |
| | 2 Wire Analog Sub Loop - NRC | | \$136.54 | \$52.54 |
| | 4 Wire Analog Sub Loop - NRC | | \$137.47 | \$52.54 |
| | 2 Wire DSL Sub Loop - NRC | | \$147.13 | \$52.53 |
| | 4 Wire DSL Sub Loop - NRC | | \$151.08 | \$52.79 |
| | 2 Wire Digital (ISDN) Sub Loop - NRC | | \$171.50 | \$52.53 |
| | DS1 Sub Loop - NRC | | \$343.45 | \$77.93 |
| | DS3 Sub Loop - NRC | | \$452.64 | \$124.14 |
| BROADBAND SERVICE | | | | |
| | DLE-ADSL-HFPSL (Line Shared) | TBD | | |
| | DLE-xDSL Sub-Loop (Data only) | TBD | | |
| | DLE-ADSL PVC (UBR) | TBD | | |
| | OCD Port Termination | | | |
| | OC3c Port | TBD | | |
| | DS3 Port | TBD | | |
| | OCD Cross-Connect to Collocation | | | |
| | OC3c Crossconnect | TBD | | |
| | DS3 Crossconnect | TBD | | |

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|---|---|-----------|-------------|----------------|
| Non-Recurring Rate Elements - Broadband Service | | | | |
| | DLE SAI Cross-connect | | | |
| | Installation | | \$72.78 | |
| | DLE-DSL Sub-Loop (Data only) | | | |
| | Installation | | \$9.11 | |
| | Disconnect | | | \$1.48 |
| | OCD Port Termination | | | |
| | DS3 Port Installation | | \$113.74 | |
| | DS3 Port Disconnect | | | \$77.38 |
| | OC3c Port Installation | | \$100.06 | |
| | OC3c Port Disconnect | | | \$66.02 |
| | OCD Cross-Connect to Collocation | | | |
| | DS3 Port Installation | | \$111.01 | |
| | DS3 Port Disconnect | | | \$19.88 |
| | OC3c Port Installation | | \$106.45 | |
| | OC3c Port Disconnect | | | \$23.66 |
| BROADBAND SERVICE - DLE - Combined Voice and Data Loop | | | | |
| | DLE-Combined Voice and Data Loop | TBD | | |
| Non-Recurring Rate Elements - Broadband Service - DLE Combined Voice and Data Loop | | | | |
| | DLE-Combined Voice and Data Loop - Installation | | \$80.21 | |
| | DLE-Combined Voice and Data Loop - Disconnect | | | \$12.50 |
| BROADBAND SERVICE | | | | |
| | DLE-ADSL-HFPL (Line Shared) | TBD | | |
| | DLE-xDSL Sub-Loop (Data Only) | TBD | | |
| | DLE-ADSL PVC (UBR) | TBD | | |
| | OC3c Port Termination | | | |
| | DS3c Port | TBD | | |
| | OC3c Port | TBD | | |
| | OCD Cross-Connect To Collocation | | | |
| | DS3 CC | TBD | | |
| | OC3 CC | TBD | | |
| UNBUNDLED DARK FIBER LOOP | | | | |
| | Dark Fiber Loop Termination (Per Termination per Fiber) | TBD | | |
| | Dark Fiber Loop Mileage (Per Fiber per Foot) | TBD | | |
| | Dark Fiber Loop Cross-Connect (Per Termination per Fiber) | TBD | | |
| Non-Recurring Rate Elements - Unbundled Dark Fiber Loop | | | | |

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|--|--|----------------|-------------|----------------|
| Inquiry | Dark Fiber Loop - NRC | | \$68.60 | |
| PER REQUEST | Dark Fiber Sub-Loop - NRC | | \$68.60 | |
| | Dark Fiber Interoffice Transport - NRC | | \$281.77 | |
| FIRM ORDER | Administrative Per Order-Connect | | \$10.88 | \$12.62 |
| PER FIBER STRAND | Dark Fiber Loop / Sub-Loop - NRC (CO to RT, HUT, CEV or PREM) | | \$308.14 | \$115.98 |
| | Dark Fiber Sub-Loop - NRC (RT to RT, HUT, CEV or PREM or HUT to CEV,PREM or CEV to PREM) | | \$325.92 | \$118.28 |
| | Dark Fiber Interoffice Transport - NRC | | \$408.33 | \$105.21 |
| LINE SHARING | | | | |
| | | | | |
| AMERITECH WISCONSIN OWNED SPLITTER | HFPL Cross-Connect Configuration Charge - NRC | | \$34.47 | \$38.98 |
| | HFPL Cross-Connect | TBD | | |
| | Splitter | TBD | | |
| | HFPL OSS Modification Charge | Hearing Needed | | |
| | | | | |
| CLEC OWNED SPLITTER | HFPL Cross-Connect Configuration Charge - NRC | | \$26.59 | \$34.02 |
| | HFPL Cross-Connect | TBD | | |
| | HFPL OSS Modification Charge | Hearing Needed | | |
| UNBUNDLED LOCAL SWITCHING | | | | |
| | Basic Port | TBD | | |
| | Ground Start Port | TBD | | |
| | ISDN - Direct Port | TBD | | |
| | ISDN - Telephone Number, per Number | TBD | | |
| | DID Port | TBD | | |
| | DID Port -Telephone Number, per Number | TBD | | |
| | ISDN Prime Port | TBD | | |
| | ISDN Prime Port - Telephone Number, per Number | TBD | | |
| | ADTS Port | TBD | | |
| | ULS Trunk Port, per DS1 port | TBD | | |
| | Centrex Basic Port | TBD | | |
| | Centrex ISDN - Dir Port | TBD | | |
| | Centrex EKL Port | TBD | | |
| | Centrex Attn Console Port | TBD | | |
| | Centrex System Features | TBD | | |
| | Local Switching Usage | | | |
| | Daily Usage Feed | TBD | | |
| | Service Coord. Fee per account, per CO | TBD | | |
| Non-Recurring Rate Elements - Unbundled Local Switching | | | | |
| | Change one type line port to another, per each change - NRC | | | |

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|---------|--|-----------|-------------|----------------|
| | CTX Cng & Rearrange per system feature per occurrence - NRC | | \$61.47 | |
| | CTX Feature Activation per occasion NRC | | \$194.86 | \$81.02 |
| | (Basic Port = Basic, Ground Start, COPTS, and Basic Centrex) | | | |
| | Service Order-Initial-Basic Port NRC | | \$0.06 | \$0.04 |
| | Basic-Subsequent Service Order- Port Conversion - NRC | | \$0.06 | |
| | Service Order-Record Work Only-Basic Port NRC | | \$0.04 | |
| | Port Connection NRC | | \$11.12 | \$0.68 |
| | Basic Port Conversion NRC | | \$11.10 | |
| | (Complex Port = PBX,DID/ADTS, ISDN Direct & Prime, Centrex: ISDN, EKL, Attendant) | | | |
| | Service Order-Initial-Complex Port NRC | | \$18.80 | \$2.95 |
| | Complex-Subsequent Service Order- Port Conversion - NRC | | \$0.06 | |
| | Service Order-Record Work Only-Complex Port NRC | | \$0.04 | |
| | Port Connection NRC | | \$82.55 | \$29.04 |
| | Generic Centrex Basic, ISDN, EKL | | \$98.37 | \$39.34 |
| | Generic Centrex Att Console | | \$98.37 | \$39.34 |
| | Network Routing, per route per switch NRC | | \$18.30 | \$10.62 |
| | (Unbundled Local Switching Trunk Port) | | | |
| | Service Order -Initial- ULS Trunk Port NRC | | \$14.70 | \$6.85 |
| | ULS-Subsequent Service Order- Port Conversion - NRC | | \$0.06 | |
| | Service Order -Record Work Only - ULS Trunk Port NRC | | \$0.04 | |
| | ULS Port Connection NRC | | \$287.95 | \$179.18 |
| | Centrex Common Block NRC | | \$104.35 | \$81.18 |
| | DID Port Add/Rearrange per Termination NRC | | \$18.30 | \$10.62 |
| | ISDN Prime Port Add or Change Channels NRC | | \$18.30 | \$10.62 |
| | Line Features - Subsequent Order - Initial Feature - Non-Recurring | | | |
| | Basic | | \$0.05 | \$0.05 |
| | Simple Centrex | | \$1.19 | \$0.80 |
| | COPTS | | \$1.06 | \$0.46 |
| | PBX | | \$48.65 | \$35.27 |
| | Complex Centrex | | \$29.12 | \$26.01 |
| | DID / ADTS | | \$58.98 | \$20.28 |
| | ISDN - Direct | | \$117.38 | \$54.47 |
| | ISDN - Prime | | \$58.39 | \$26.89 |
| | Line Features - Initial & Subsequent Order - Additional Feature - Non-Recurring | | | |
| | Basic | | \$0.02 | \$0.02 |

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|--|--|----------------|-------------|----------------|
| | Simple Centrex | | \$0.28 | \$0.31 |
| | COPTS | | \$0.22 | \$0.16 |
| | PBX | | \$6.54 | \$7.58 |
| | Complex Centrex | | \$5.29 | \$5.11 |
| | DID / ADTS | | \$2.89 | \$3.36 |
| | ISDN - Direct | | \$9.03 | \$10.47 |
| | ISDN - Prime | | \$2.87 | \$3.32 |
| | Customer Training per Hour per Occ - NRC | | \$73.21 | |
| | Custom Routing - per new LCC, per switch - NRC | | \$294.59 | |
| ULS - Shared Transport | | | | |
| | ULS Switch Usage per MOU | | | |
| | ULS-ST Reciprocal Compensation per MOU | Not determined | | |
| | ULS-ST SS7 Signaling Transport per Message | TBD | | |
| | ULS-ST Blended Transport Usage per MOU | TBD | | |
| | ULS-ST Common Transport per MOU | TBD | | |
| | ULS-ST Tandem Switching per MOU | TBD | | |
| RECIPROCAL COMPENSATION | | | | |
| | End Office Switching Setup | Not determined | | |
| | End Office Switching per MOU | Not determined | | |
| | Tandem Switching Setup | Not determined | | |
| | Tandem Switching per MOU | Not determined | | |
| | Transport Facilities Termination Setup | Not determined | | |
| | Transport Facilities Termination per MOU | Not determined | | |
| | Transport Facilities Setup Per Mile | Not determined | | |
| | Transport Facilities per MOU Per Mile | Not determined | | |
| TRANSIT SERVICE | | | | |
| | Tandem Switching Per Minute | TBD | | |
| | Tandem Transport Termination Per Minute | TBD | | |
| | Tandem Transport Facility Mileage Per Minute | TBD | | |
| INTEROFFICE TRANSMISSION FACILITIES | | | | |
| | DS1 Entrance Facility, per POT- Band A | TBD | | |
| | DS1 Entrance Facility, per POT- Band B | TBD | | |
| | DS1 Entrance Facility, per POT- Band C | TBD | | |
| | Interoffice Transport DS1 CMT, per term | TBD | | |
| | Interoffice Transport DS1 CM, per mile | TBD | | |
| | DS1 to Voice CO Multiplexing | TBD | | |
| | DS3 Entrance Facility, per POT- Band A | TBD | | |
| | DS3 Entrance Facility, per POT- Band B | TBD | | |

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|---------|--|-----------|-------------|----------------|
| | DS3 Entrance Facility, per POT- Band C | TBD | | |
| | Interoffice Transport DS3 CMT, per term | TBD | | |
| | Interoffice Transport DS3 CM, per mile | TBD | | |
| | DS3 to DS1 CO Multiplexing per arrangement | TBD | | |
| | OC-3 Entrance Facility per POT | TBD | | |
| | OC-3 Interoffice Mileage Termination per POT | TBD | | |
| | OC-3 Interoffice Mileage - per mile | TBD | | |
| | OC-3 Add/Drop Multiplexing - per arrangement | TBD | | |
| | OC-3 Add/Drop Function per DS3 Add or Drop | TBD | | |
| | OC-3 Add/Drop Function per DS1 Add or Drop | TBD | | |
| | OC-3 Cross Connection of Services OC-3 to OC-3 Cross Connect - per circuit | TBD | | |
| | OC-3 1+1 Protection per OC-3 Entrance Facility | TBD | | |
| | OC-3 1+1 Protection with Cable Survivability per OC-3 Entrance Facility | TBD | | |
| | OC-3 1+1 Protection with Cable Survivability per OC-3 Entr. Facility/Qtr. Route mile | TBD | | |
| | OC-12 Entrance Facility per POT | TBD | | |
| | OC-12 Interoffice Mileage Termination per POT | TBD | | |
| | OC-12 Interoffice Mileage - per mile | TBD | | |
| | OC-12 Add/Drop Multiplexing - per arrangement | TBD | | |
| | OC-12 Add/Drop Function per OC-3 Add or Drop | TBD | | |
| | OC-12 Add/Drop Function per DS3 Add or Drop | TBD | | |
| | OC-12 Cross Connection of Services OC-12 to OC-12 Cross Connect - per circuit | TBD | | |
| | OC-12 1+1 Protection per OC-12 Entrance Facility | TBD | | |
| | OC-12 1+1 Protection with Cable Survivability per OC-12 Entrance Facility | TBD | | |
| | OC-12 1+1 Protection with Route Survivability per OC-12 Entr. Facility/Qtr. Rte mi | TBD | | |
| | OC-48 Entrance Facility per POT | TBD | | |
| | OC-48 Interoffice Mileage Termination per POT | TBD | | |
| | OC-48 Interoffice Mileage - per mile | TBD | | |
| | OC-48 Add/Drop Multiplexing - per arrangement | TBD | | |
| | OC-48 Add/Drop Function per OC-12 Add or Drop | TBD | | |
| | OC-48 Add/Drop Function per OC-3 Add or Drop | TBD | | |
| | OC-48 Add/Drop Function per DS-3 Add or Drop | TBD | | |

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|--|---|-----------|-------------|----------------|
| | OC-48 Cross Connection of Services OC-48 to OC-48 Cross Connect - per circuit | TBD | | |
| | OC-48 1+1 Protection per OC-48 Entrance Facility | TBD | | |
| | OC-48 1+1 Protection with Cable Survivability per OC-48 Entrance Facility | TBD | | |
| | OC-48 1+1 Protection with Route Survivability per OC-48 Entr Facility/Qtr. Rte mi | TBD | | |
| Non-Recurring Rate Elements - Interoffice Transmission Facilities | | | | |
| | DS1 Clear Channel Capability per circuit arranged (New/Established) - NRC | | \$268.85 | \$63.37 |
| | OC-3 1+1 Protection with Cable Survivability per OC-3 Entrance Facility - NRC | | \$3,017.94 | |
| | OC-12 1+1 Protection with Cable Survivability per OC-12 Entrance Facility - NRC | | \$3,017.94 | |
| | OC-48 1+1 Protection with Cable Survivability per OC-48 Entrance Facility - NRC | | \$3,017.94 | |
| | Administrative Charge, per order - DS1 Service -NRC | | Comments | Comments |
| | Administrative Charge, per order - DS3 Service -NRC | | Comments | Comments |
| | Administrative Charge, per order - OC-3 Service-NRC | | \$97.48 | \$54.04 |
| | Administrative Charge, per order - OC-12 Service-NRC | | \$97.48 | \$54.04 |
| | Administrative Charge, per order - OC-48 Service-NRC | | \$97.48 | \$54.04 |
| | Design and CO Connection Charge, per circuit - DS1 Service-NRC | | Comments | Comments |
| | Design and CO Connection Charge, per circuit - DS3 Service-NRC | | Comments | Comments |
| | Design and CO Connection Charge, per circuit - OC-3 Service-NRC (Check for Travel Costs) | | \$487.44 | \$95.82 |
| | Design and CO Connection Charge, per circuit - OC-12 Service-NRC (Check for Travel Costs) | | \$487.44 | \$95.82 |
| | Design and CO Connection Charge, per circuit - OC-48 Service-NRC (Check for Travel Costs) | | \$487.44 | \$95.82 |
| | Carrier Connection Charge per Termination - DS1 Service-NRC | | Comments | |
| | Carrier Connection Charge per Termination - DS3 Service-NRC | | Comments | |
| | Carrier Connection Charge per Termination - OC-3 Service-NRC (Check for Travel Costs) | | \$903.31 | |
| | Carrier Connection Charge per Termination - OC-12 Service-NRC (Check for Travel Costs) | | \$903.31 | |

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|---|--|-----------|-------------|----------------|
| | Carrier Connection Charge per Termination - OC-48 Service-NRC (Check for Travel Costs) | | \$903.31 | |
| DARK FIBER INTEROFFICE | | | | |
| | Dark Fiber Interoffice Termination (Per Termination per Fiber) | TBD | | |
| | Dark Fiber Interoffice Mileage (Per Fiber per Foot) | TBD | | |
| | Dark Fiber Interoffice Cross Connect (Per Termination per Fiber) | TBD | | |
| UNBUNDLED TANDEM SWITCHING | | | | |
| | Unbundled Tandem Usage Cost - per Minute of Use | TBD | | |
| | Tandem Trunks (DSI) | TBD | | |
| Non-Recurring Rate Elements - Unbundled Tandem Switching | | | | |
| | Trunk Translations - Features - NRC | | \$144.40 | \$114.08 |
| | Service Order NRC | | \$17.64 | \$8.22 |
| | Service Order - Subsequent - Add/Cng NRC | | \$18.30 | \$10.62 |
| SS7 / STP ACCESS | | | | |
| | Signal Transfer Point - Port Termination -(For Both IAM/TCAP msgs) | TBD | | |
| | Signal Switching/IAM msg | TBD | | |
| | Signal Transport/IAM msg | TBD | | |
| | Signal Formulation/IAM msg | TBD | | |
| | Signal Tandem Switching/IAM msg | TBD | | |
| | Signal Switching/TCAP msg | TBD | | |
| | Signal Transport/TCAP msg | TBD | | |
| | Signal Formulation/TCAP msg | TBD | | |
| Non-Recurring Rate Elements - SS7 / STP Access | | | | |
| | Signal Transfer Point per Port - (For Both IAM/TCAP msgs) - NRC | | \$871.40 | \$182.17 |
| | Orig.Point Code/per svc added or changed - NRC | | \$26.18 | \$30.35 |
| | Global Title Address Trans per svc added/changed - NRC | | \$12.37 | \$26.72 |
| CNAM ACCESS | | | | |
| | CNAM Query | TBD | | |
| 800 ACCESS | | | | |
| | Fac.Based-Local STP Conn-800DB Carrier ID Only | TBD | | |
| | Fac.Based-Local STP Conn-800DB Routing Options | TBD | | |
| | Fac.Based-Reg. STP Conn-800DB Carrier ID Only | TBD | | |
| | Fac.Based-Reg. STP Conn-800DB Routing Options | TBD | | |

| PRODUCT | UNBUNDLED NETWORK ELEMENTS TYPE | Recurring | NRC Install | NRC Disconnect |
|--|--|-----------|-------------|----------------|
| | Non-Fac Based-800DB Call Routing Query | TBD | | |
| | Non-Fac Based-800DB Routing Options | TBD | | |
| LIDB | | | | |
| | Fac.Based-Local STP Conn-LIDB Validation | TBD | | |
| | Fac.Based-Local STP Conn-LIDB Transport | TBD | | |
| | Fac.Based-Local STP Conn-LIDB to Other DBs | TBD | | |
| | Fac.Based-Reg. STP Conn-LIDB Validation | TBD | | |
| | Fac. Based-Reg. STP Conn-LIDB Transport | TBD | | |
| | Non-Fac.Based - LIDB Validation | TBD | | |
| | Non-Fac. Based - LIDB Transport | TBD | | |
| | Non-Fac. Based - LIDB to Other Databases | TBD | | |
| Non-Recurring Rate Elements - OS/DA | | | | |
| | OS/DA Front End Branding per Trunk Group - NRC | \$330.53 | | |
| UNE-P MIGRATION - EXISTING COMBINATIONS WITH DIAL TONE | | | | |
| | Service Order - Migration Order (Install) | | \$0.06 | |
| | Service Order - Migration Order (Disconnect) | | | \$0.04 |
| UNE-P MIGRATION - EXISTING COMBINATIONS WITHOUT DIAL TONE | | | | |
| | Line Connection (Install) | | \$11.91 | |
| | Line Connection (Disconnect) | | | \$1.13 |
| MANUAL SERVICE ORDER - UNE-P POTS | | | | |
| | Manual Service Order (Install) | | Comments | |
| | Manual Service Order (Disconnect) | | | Comments |

TBD Resulting rates will be determined based on Commission staff review of SBC's Compliance Filings with the XX 2003 Order UNE Compliance Order.

Hearings Needed Resulting rates will be determined following further hearing.

Comments Resulting rates will be determined after Commission decision based on comments.